DOCUMENT RESUME

ED 323 676 EC 232 101

TITLE	North Carolina Symposium on Early Education for the Handicapped. Conference Proceedings (February 25-26, 1988).
INSTITUTION	North Carolina State Dept. of Public Instruction, Raleigh. Div. for Exceptional Children.
PUB DATE	Feb 88
NOTE	124p.
PUB TYPE	Collected Works - Conference Proceedings (021)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Classroom Techniques; *Disabilities; *Early Childhood Education; Educational Environment; Evaluation Methods; Individualized Education Programs; Interpersonal Competence; *Intervention; Parent Counseling; Play; Rating Scales; *Student Evaluation; Teacher Education; *Test Interpretation
IDENTIFIERS	Individualized Family Service Plans

ABSTRACT

Nine papers comprise the proceedings of a 1988 North Carolina symposium on early childhood education. The first paper, "Preschool Assessment" (Nancy Johnson-Martin), focuses on norm-referenced psychological assessment to determine eligibility and programming needs. "Appropriate Use and Interpretation of Assessments of Young Handicapped Children" (Robert Shehan) stresses application of assessment information to educational programming decisions. Next, "Assessing Environmental Provisions of Young Handicapped Children" (Thelma Harms and Richard M. Clifford) includes a description of the Early Childhood Environmental Rating Scale and a reprinted article titled "Comparison of Preschool Environments for Handicapped and Nonhandicapped Children." Sarah Rule and Barbara Fiechtl, in "Developing Functional Intervention Plans--the IEP and IFSP," provide a step-by-step guide to development of the Individualized Education Program and the Individualized Family Service Plan. Next, "Speech-Language Development Within the Classroom" (Mildred Laney Blackburn), offers teaching ideas from a teacher of the hearing impaired and speech-language delayed. Jeanne B. Henry, in "Assuring Learning Through Play," discusses the role of play and offers two examples of play activities which meet multiple objectives. Phillip Strain describes implementation of "Peer Mediated Instruction for Young Children's Social Skill Deficits." Patricia Miller considers teacher training needs in "Public School Teachers for Preschool Handicapped Children--Are They Ready?" Finally, specific suggestions and a case study are offered in "Listening To, Guiding, and Assisting Parents," by Mary Jane Brotherson. References accompany some of the papers. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

EC

Conference Proceedings
February 25 -26, 1988

U.S. DEPARTMENT OF EDUCATION

North Carolina Symposium on Early Education for the Handicapped

Sponsored by
N.C. Department of Public Instruction
Division for Exceptional Childern

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Foreword

Providing early intervention for our handicapped children has proven to be highly effective. Programs have been designed and implemented to support numerous handicapping conditions. However, these programs are only as effective as the staff who deliver them. The North Carolina Symposium on Early Education for the Handicapped brought together these educators to share their views of the services and components of the programs they provide.

The conference participants gleaned much from the presentations. The following proceedings are printed as written by the individual authors. They are not presented with continuity of grammar or form. To do so may have distorted the premise of the presentation. It is our wish that those who participated and those reading these proceedings will be energized to continue their forward thrust to improve the quality of life for the preschool child with handicaps.

A. Craig Phillips
State Superintendent of Public Instruction

Theodore R. Drain
Assistant State Superintendent
Support Services Area

Theodore R. Drain

E. Lowell Harris. Director
Division for Exceptional Children

E. Lowell Harris

Introduction

As we in North Carolina have undertaken the task of implementing Public Law 99-457, the scope of our endeavor becomes increasingly clear. We are serving not only the handicapped children protected by the law, but the total family unit. These services are coordinated through numerous agencies and contractors who maintain a collective philosophy: early intervention may prevent long-range services needed by the child later in life. This in turn impacts on budgets at the local, state and federal levels.

However, not all applications of Public Law 99-457 are clinically measurable. Through the various avenues of intervention, the child and his family develop coping skills which can lessen the stress the handicap brings into their lives. The services can improve the present quality of life and build a foundation for success in later years.

Many people touch the lives of these children and their families. Each must be understanding and knowledgeable of the handicap and provide optimum intervention. The State Department of Public Instruction has positioned itself with excellent resources to assist in the dissemination of information and to provide support services to the people who interface with these children.

At the North Carolina Symposium of Early Education for the Handicapped, presentations dealt with differing aspects of education for these children and their families. The articles contained in this publication are representative of the topics discussed at the symposium. They vary in subject matter from the importance of play for the child to writing clinical intervention plans.

It is our hope that these proceedings will stimulate your thinking and assist you in focusing on the vast scope of our task. We encourage you to make use of this document and share it with others to enhance the quality of life for the young child with handicaps.

Acknowledgements

The symposium and these proceedings would not have been possible without the assistance of many individuals and groups. We would like to give special recognition to the eight presenters who provided copies of their presentations for this document; to Janis Dellinger and Kathy Nisbet, Consultants for Preschool Programs for the Handicapped with the Division for Exceptional Children, for their roles in planning and carrying out the symposium; and to David Mills, Assistant Director in the Division for Program Development Services, and Lowell Harris, Director of the Division for Exceptional Children, for their encouragement, support and ideas for the symposium; to Pam Cloer, Consultant for Preschool Programs for the Handicapped with the Division for Exceptional Children, for preparation of these proceedings for duplication and dissemination; and to Barbara Britton, the Division's Public Information Specialist, who edited all written material related to the symposium.

Special thanks go to Pam Munns and Lou Martin for typing the correspondence and materials for the symposium and these proceedings and to the Division of Communication Services for production assistance.

TABLE OF CONTENTS

Page

Foreword.. 1

Introduction...................................... 2

Acknowledgements.................................. 3

"Preschool Assessment"............................. 7

Nancy Johnson-Martin
Children with Handicaps
Integrated for Learning
in Daycare (CHILD)
Durham, North Carolina

*"Appropriate Use and Interpretation
of Assessments of Young Handicapped Children"*........ 15

Robert Shehan
Cleveland State University
Cleveland, Ohio

*"Assessing Environmental Provisions
for Young Handicapped Children"*..................... 27

Thelma Harms and Richard M. Clifford
University of North Carolina
Chapel Hill, North Carolina

*"Developing Functional Intervention Plans:
The IEP and IFSP"*................................... 53

Sarah Rule and Barbara Fiechtl
Utah State University
Logan, Utah

*"Speech-Language Development
Within the Classroom"*............................... 65

Mildred L. Blackburn
Lincoln County Schools
Lincolnton, North Carolina

"Assuring Learning Through Play".................... 75

Jeanne B. Henry
Private Consultant
Colonial Heights, Virginia

*"Peer-Mediated Instruction for
Young Children's Social Skill Deficits"*............. 87

Phillip S. Strain
University of Pittsburgh School
of Medicine
Pittsburgh, Pennsylvania

*"Public School Teachers for Preschool
Handicapped Children - Are They Ready"*.............. 101

Patricia S. Miller
Appalachian State University
Boone, North Carolina

*"Listening to, Guiding, and Assisting
Parents"*... 109

Mary Jane Brotherson
University of Kentucky
Lexington, Kentucky

Preschool Assessment

Nancy Johnson-Martin
Children with Handicaps
Integrated for Learning in Daycare (CHILD)
Durham, North Carolina

PRESCHOOL ASSESSMENT

This presentation will focus on norm-referenced psychological assessment of young children for purposes of determining eligibility and for making programming suggestions. We will not be talking about specific criterion-referenced measures for teachers to use in planning IEPs. There is not sufficient time to do both. I chose to focus on psychological assessment for the sake of the psychologists in the audience who, if their training is like that of most psychologists, have rarely assessed a preschool child and have had little, if any, course work on children in this age range. In addition, I have always felt that it is very useful for teachers to understand more about the tests psychologists use. I suspect all of you are aware that all the tests that purport to measure "intelligence" do not measure the same skills; just as all tests that purport to test reading achievement do not test the same skills. One needs to know what different tests do measure; what their limitations and assets are. Informed teachers keep us psychologists on our toes. A teacher often knows a child well before referring him or her for testing and can supply information that will make the psychologist more effective. Nothing is more helpful than a teacher who says, "I've been wondering what this child would do on some test that does not have as big a stress on language--would the Zibirinski do that?" A good psychologist may not admit to not knowing about the Zibirinski but would make every effort to find out about it before assessing the child. Just to set the minds of the psychologists at ease--I made up that test. To my knowledge such a one does not exist.

The second point I would like to make by way of introduction is that I will be focusing primarily on cognitive kinds of assessment but will save some time at the end to discuss emotional and behavioral assessment and some particular problems in determining emotional/behavioral disturbance in the preschool period.

COGNITIVE ASSESSMENT

Why is preschool assessment different from school-age assessment?

Development is a bigger issue. Neurological maturization plays a major role in how competent children look and there is a fairly wide window of normality. For example, it is normal for 5-year-olds to write in mirror images, to reverse letters. It is also normal for them to be able to form letters correctly. These differences may be found in children whose overall I.Q.s are normal and even in those whose I.Q.s are in the superior range. The same holds true for some articulation errors, for differences in balance, etc.

Because of normal variations in underlying developmental processes, it is difficult to predict future development. You are all aware of the problems in the school-age population of distinguishing between children who are basically slow learners and those who have genuine learning disabilities. This state developed formulas to try to make that distinction more "objective." Yet there are enormous problems with that objectification because it is confounded by social class, opportunities children have had for learning, etc. In the preschool population this problem is worse. The task force on eligibility from the State Interagency Committee has been arguing for less specific labels at the preschool level than are used at school age. We particularly do not want to have to make the distinction between learning disabilities and other problems at these early ages. However, to date the Department of Public Instruction has not accepted these recommendations out of concern for documenting handicaps in order to get federal funding. It is a complicated issue which will take some time and experience to decide.

To be a little more concrete, I would like to give two examples of the kinds of children that will likely be mislabeled with the more specific labels. The first is the child with dyspraxia or motor planning problems. Often these children have significant perceptual motor and articulation problems which may markedly interfere with performance on many standardized tests. Yet, their language comprehension may be fully normal or even above normal. Such a child is apt to be mislabeled as retarded. We saw a fair number of such children at the DDDL or CDL as it is now known (The Center for Development and Learning at UNC-CH). Education of these children is far more effective if they get specific therapies and the curriculum is modified to deal with their deficits than if they are taught as cognitively impaired children.

A second example I will draw from my own family. At age 5, the Spring before entering kindergarten, one of my children served as a practice subject for an occupational therapist interested in learning disabilities. She came to me with a long face and promised me he was going to have major problems in school. He had all of the classic symptoms: mixed dominance, clumsiness, impulsivity, directional confusions, etc. I was fully prepared to deal with a child with learning disabilities. To my surprise and pleasure, however, he learned to read more rapidly than either of my other children and had excellent math skills. His mixed dominance and directional confusions remained--at age 11 he still occasionally reversed letters. However, school achievement was never affected until speed of written work became an issue. To this day he has a writing disability but not a learning disability in any larger sense.

The second way in which preschoolers are quite different from older children is in their behavior. Children of school age are accustomed to taking direction, to sitting quietly and answering questions. Some preschoolers are also, but many are not. A fair number, at age three, will be in a stage of generally noncompliant or manipulative behavior. I remember one very bright child we saw at the Frank Porter Graham Center as part of a research study who simply refused to talk. He would do all items that required pointing or some other motor response but would not talk. Three different examiners worked with him. None of the tricks any of us had found useful with other children worked with this child.

Both teachers and psychologists need much greater skill in behavior management and flexibility in approaches to teaching or gaining cooperation. Psychologists need both speed and dexterity with test materials in order to ensure compliance and an accurate test.

Instruments for use in general cognitive assessments.

The table, Preschool Assessment Instruments, which is attached, covers the most commonly used tests for preschool assessment and summarizes information about them: the ages for which they are appropriate, the kinds of scores obtained, their assets, and their problems.

Report writing for preschool assessments.

Even more than in reports of other children, the behavioral observation section should be done carefully. Observations of how a child reacted to different kinds of tasks are often as important as the scores he or she earned. Also, careful observation and reporting of fine motor patterns, speech patterns, and interactive capabilities are critical information.

When reporting results on a particular test, tell something about the test--what kinds of responses are required of the child, what skills it measures, etc. Describe and give examples of the kinds of items the child passed and failed. Try to consider how these might relate to tasks children normally have to master in preschool. Readers will be less familiar with preschool tests than with tests for older children and need to have this information to make use of the test information.

I cannot give good advice about what kinds of statements will need to be made to qualify a child. Decisions have not yet been made by State Department of Public Instruction as to the eligibility requirements for specific categories. In the near future, I suspect school systems will be developing their own, waiting for more specific guidance from Raleigh.

Emotional and behavioral assessment.

Numerous problems are encountered when assessing the preschool child.

Children this young can rarely talk about their problems or respond to usual testing techniques. One is dependent on ratings or observations of others which are necessarily contaminated by the ongoing relationship with the child.

Again, we do not have any guidelines as to what constitutes a Behaviorally-Emotionally Handicapped child at the preschool level. The children who will be most readily identified by teachers are, of course, the aggressive children. We also need to be concerned, however, with those who are withdrawn and/or lack prosocial skills. I believe our best approach at this point is to rely on a combination of observation and data collection in the classroom, observations of the child in a one-on-one situation when activities are structured and when activities are not structured, teacher behavior ratings and parent behavior ratings. It is extremely important to try to determine if a child has global problems; i.e., problems at home as well as at school, problems when engaging in free play as well as problems when pressed to perform, problems with peers as well as adults, etc. There are some well tested behavioral rating scales that have good norms and extend down into the preschool period. Among them are the Conners Parent and Teacher Rating Scales which have norms down to age 3, the Achenbach Child Behavior Checklist which has norms down to 4 years, and the Preschool Behavior Questionnaire of Behar and Springfield. When the primary concern is oppositional behavior the Eyberg Child Behavior Inventory is useful, and for hyperactivity, the Werry-Weiss Peters Activity Scale is often the instrument of choice. I am sure there are also others with which I am not familiar. The important thing, I believe, is to select a well-normed rating scale so that one has a basis for saying this behavior is or is not truly deviant. This data should be integrated with direct observations you have made particularly observations that shed light on the contingencies operating in the environment of concern.

The role of parents.

One of the major provisions of the new law is that parents will be involved in preschool education. Both psychologists and teachers may have to change current models in order to make this occur. Home visits may have to become part of the norm. We are going to have to become much more attuned to parental goals and values for their children and to include these in our educational plans. Parents will also have to be a major part of our assessment process. We have to be willing to trust their judgments about the child's capabilities until there is strong evidence that they are incorrect. I suspect there will be a lot of mutual education going on that will be good for the children and the schools in the long run.

PRESCHOOL ASSESSMENT INSTRUMENTS
(Cognitive Abilities)

Primary Choices

Wechsler Preschool and Primary Scale of Intelligence
McCarthy Scales of Children's Abilities
Kaufman Assessment Battery for Children
Stanford Binet Intelligence Scale (Form L-M)
Stanford Binet Intelligence Scale (Fourth Edition)

For Special Populations

Visually Impaired
Reynell-Zinkin Scales for Young Visually Impaired Children
Perkins Binet

Hearing/Communication Impaired, Autistic
Merrill Palmer Scales of Mental Ability

Cerebral Palsy, Speech Impaired
French Pictorial Intelligence Test
Peabody Picture Vocabulary Test

Useful Additions

Bracken Test of Basic Concepts
Boehm Test of Basic Concepts-Revised

Appropriate Use and Interpretation of Assessments of Young Handicapped Children

Robert Shehan
Cleveland State University
Cleveland, Ohio

EXPLANATION OF HANDICAPPED AND INFORMATION ON EACH

Most assessment literature these days emphasizes that early childhood assessment takes place within a decision theory framework. Several authors suggest that a sequence of questions should be used to guide decisions about selection, development, and use of assessment information. Consider the following decision:

DECISION # 1

- What do you want to know from assessment?
- Who needs further assessment?
- What is the most appropriate placement for a child?
- How should an interventionist work with a child?
- What progress has been made in working with a child?
- How should a program be judged for its intervention efforts?

Once decision # 1 has been answered, you must then ask what content, context, form and source should guide your assessment.

DECISION # 2

- What content must be tapped in your assessment?

This will vary by what you want to know from your assessment (and by existing state and local policy).

- General status of developmental functioning (overall developmental age)
- A thorough mapping of skill level in a particular area
- A child's ability to function socially in a group setting
- A child's typical response bias to novel stimuli
- A child's mastery motivation (task attentiveness and joy in learning)
- Average performance of children on IEP-related goals during a six-month period

DECISION # 3

- What context is most appropriate for assessment?

Again, the context will vary depending upon the reason for assessment and the desired content of assessment.

- Performance naturally occurring in a home
- Performance naturally occurring in a preschool
- Performance naturally occurring in an intervention program
- Performance occurring in a structured teaching situation
- Performance occurring in a structured testing situation

DECISION # 4

- What source is best to obtain assessment information?

One concern in asking this question is to determine whether the risk of obtaining information from a source is balanced out by any possible benefits.

- Parent report
- Teacher report
- Therapist report
- Psychologist report

The answers to these questions then serve as determinants of assessment strategies, measures, and uses. For example, many educators working with motorically impaired children will argue that once identification and placement of a child has occurred, subsequent attention must be directed at carefully mapping out a child's response to process-oriented assessment - assessment occurring within a series of adapted instructional sequences. These educators (cf. Dubose, 1977; Robinson, in press) argue that confirmation of motoric impairment and placement in an intervention program effectively closes the door on standardized assessment measures.

In similar fashion, Carl Dunst and Robin McWilliam propose that alternative assessment strategies be employed with multiply handicapped children once those children are judged eligible for intervention. They propose a mapping of a child's capabilities (they call it a typography) to interact with caregivers. For example, Dunst and McWilliam argue that assessment of multiply handicapped children must consider the following behaviors across the major contexts of an intervention program:

- Children's ability to attend.
- Children's ability to initiate interactions.
- Children's ability to differentiate interactions.
- Children's ability to use a conventionalized system of signals.
- Children's ability to function with symbols.

Although traditional measures might include items here or there that assess interactive capabilities, the large bulk of items (i.e., child can stack three blocks) cannot be thought to have explanatory or causative value from an interventionist's perspective.

Unfortunately, the trends toward decision-based assessment efforts and process-oriented assessment have been slow to develop. I argue that one reason may be that information users have too rarely been involved in the process of deciding what data to collect and how the data should be collected. We tend to overlook the fact that the large bulk of standardized measures were developed to predict later performance in the absence of intervention. In most cases with handicapped preschoolers we are simply unable to use such information for a variety of applications.

Yet another approach that is used increasingly is that a variety of considerations influence success of any particular instructional attempt. We should not be measuring a visually impaired preschooler's fine motor capabilities without also ascertaining her mastery motivation, her temperament, and her language as these all interact to determine her progress in an early intervention effort.

I argue very strongly that the decisions we make in an assessment effort, our adherence to traditional or choice of nontraditional efforts, and our determination of appropriate profiles must also be guided by our knowledge of the subgroups of children with whom we work. While I accept the individuality of every handicapped preschooler, I also argue for greater awareness of developmental trends evident in our children. Consider, for example the following:

WHAT DO WE KNOW ABOUT VISUALLY IMPAIRED PRESCHOOLERS?

- Low incidence (less than one percent of population).
- Frequently children with multiple impairments.
- Causes include both prenatal and postnatal factors.
- Definite delays in development occur.
- Few differences in sequence of development occur.
- In absence of multiple impairments, these children are likely to attain normal development.
- In preschoolers and toddlers, there is a greater incidence of socio-emotional problems (i.e., separation anxiety) that is not related to the strength of parent-child relationships.
- There is a greater incidence of passivity in these preschoolers than we see in sighted children.

The initial assessment of visually impaired children is typically conducted by pediatricians during office examinations although preschool teachers can be trained to use vision charts and symbol charts to conduct general screening. Initial assessment of vision in multiply handicapped youngsters has been addressed by researchers such as Chuck Spellman at the Parsons Center in Kansas (Parsons Visual Acuity Test).

Once identified, these children are difficult to assess using traditional measures. Almost all test data gathered on these pupils was gathered for the purpose of distinguishing between visually impaired and sighted children. Intelligence testing, primarily verbal rather than performance, has almost all been restricted to an adaptation of the Binet (Davis, 1980) and the verbal scales of the WISC. Social competency has largely been assessed by an instrument developed in 1957 (Maxfield and Bucholz).

Our efforts in working with these children have convinced us that attainment of normal growth and development is to be expected for the many visually impaired children who do not have multiple impairments, and a normal sequence of development is expected even for those visually impaired youngsters who do have other complicating factors. We can use this information to help guide our intervention efforts, even though our traditional instrumentation is virtually useless.

Consider, on the other hand, the following:

WHAT DO WE KNOW ABOUT MENTALLY RETARDED PRESCHOOLERS?

- Considered a relatively high incidence handicapping condition (1-3 percent of population).
- Causes include both organic and nonorganic factors.
- Definite delays in development occur (quantitive delay).
- Few variations of developmental sequence are to be expected (no qualitative difference).
- Expectation of attaining normal development is unlikely, at least for those children whose mediating causes are organic.
- Verbal ability and performance ability are both measurable (although fluctuating speech defects are likely in 10-33 percent of MR population).
- Mental age of these children is a better predictor of both cognitive and noncognitive capabilities than chronological age.

The mentally retarded children whose etiology involved chromosomal abnormalities (i.e., Downs Syndrome) frequently move right into full assessment rather than screening. Screening measures that are used with other subgroups of these children are almost always developmental measures such as the McCarthy Screening Test, the Denver Developmental Screening Test, and so forth. These children seem to frequently spend time being classified as "developmental delay," although I hasten to add that many other children classified in the early childhood years as developmental delay resume normal developmental progress in response to enriched intervention or move into other categories of handicapped youngsters.

Once identified as mentally retarded, these children are frequently testable using traditional measures. One reason for this may be that these children were more likely to have been involved in standardization samples of published tests than almost any other subgroup of handicapped individuals. We know from experience that these children benefit from psychoeducational intervention, the earlier the better. These are pupils who appear to benefit from early intervention in ways that we can measure and monitor.

Consider what we know of the development of yet another group of individuals frequently served in early intervention programs:

WHAT DO WE KNOW ABOUT EMOTIONALLY AND BEHAVIORALLY DISTURBED PRESCHOOLERS?

- The categorization of emotional and behavioral disturbance almost defies definition and represents a group of children exhibiting a wide variety of behavior including almost polar opposites (over-controlled behaviors and under-controlled behaviors).
- These children are difficult, at best, to assess using traditional methods as the bulk of those methods require establishment of a communicative relationship between child and examiner - a requirement that is almost definitionally impossible for this type of preschooler.
- Display of splinter skills mistakenly convinces both laypersons and educators that normal intelligence must exist beneath the bizarre behaviors of autistic children (one subgroup of this population).
- Memory abilities do appear relatively intact for autistic children.
- Autistic children do exhibit some motor delay.
- The developmental patterns and usage of language by autistic children does differ from those of normal children. Autistic children lack pre-language skills and inner language.
- Approximately 75 percent of hyperactive children have at least one specific learning disability.
- Hyperactive children have less well developed fine motor skills than normal peers.
- On individually administered IQ tests, hyperactive pupils perform similarly to normal peers although their performance is markedly lower on group IQ tests.
- Receptive language skills of hyperactive pupils are generally lower than found for normal peers although these children talk more spontaneously than normal peers.

Assessment of these children (and intervention with these children) is a challenge. Dealing with the two polar opposites (hyperactive preschoolers and autistic preschoolers) we can clearly suggest some modification of testing procedures or a better interpretation of obtained results using non-modified procedures.

Hyperactive childrens' preference for novel stimulation would suggest willing subjects for a testing situation. Their response to novel stimuli, however, will be characterized by high variability and by minimal delay in responding (hence a likelihood of impulsive and incorrect responding). Autistic children will demonstrate great avoidance behavior in a novel testing situation and care will need to be taken to assess in a fashion that is as routinized as possible.

Caution must also be suggested in testing these children that a valid purpose for testing must be demonstrated as the testing process will take great effort and yield highly mixed results. Assessors should keep in mind that the single defining characteristic of this population, difficulty in establishing a positive communicative relationship with others, mitigates against any assessment process.

Consider what we know about another population:

WHAT DO WE KNOW ABOUT DEAF AND HEARING IMPAIRED PRESCHOOLERS?

- Relatively low incidence (less that 8 percent of population).
- Two frequent causes include hereditary hearing impairment and fetal infections.
- Genetically caused deafness *least likely* to be multiply handicapped.
- Hearing impairment alone *not* likely to be related to observed delays in motor development.
- Hearing impairment alone is also *not* likely to cause delays in cognition although reliance of assessment measures on auditory channels obscures this perspective.
- Deaf children are considered 2-3 times more likely to be socially delayed, although observers' attitudes towards deafness and familiarity with communications systems are likely to mediate observation of such delay.
- Modification of testing procedures to include signing systems of American Sign Language (ASL) can result in testable performance, although examiners' familiarity with the signing system of the child has *profound* implications for obtained results.
- Family attitudes toward deafness clearly influence preschool child performance.

A key issue in working with deaf and hearing impaired preschoolers is the attitude toward deafness held by the teacher or examiner who is working with the children. If an examiner views deafness as a deficit, children are rated as scoring more poorly than when examiners view deafness as a difference in communication capability. One problem in this area is that there are few agreed upon standards for test examiners to demonstrate competence of signing systems and language. Hoffmeister argues that professionals who have not had ASL and signed systems training for a minimum of two years are equivalent to those who learn Spanish in one or two semesters and proceed to assess Hispanic children in a bilingual setting.

Consider what we know about yet another population of children:

WHAT DO WE KNOW ABOUT MOTORICALLY HANDICAPPED PRESCHOOLERS?

- Motorically handicapped preschoolers are of moderate incidence in the handicapped population. Approximately one half of all motorically handicapped preschoolers suffer from the nonprogressive disorder of cerebral palsy.

- Diagnosis of cerebral palsy prior to 12 months of age provides the greatest opportunity for change in children.

- Of all the motorically impaired children, cerebral palsied children experience the most severe communication disability.

- Too little is known about subgroups of children with motoric impairment, although a majority of these children suffer from related damage to their central nervous system.

- Despite wide variation in cognitive capacities of children with motoric impairments, definite delays in cognitive functioning are observed when these children are preschoolers.

- The sequence of cognitive development of children with motoric impairment is similar to that found with non-handicapped peers.

- Infants with motoric impairment certainly have a greater frequency of disrupted parent-child relationships and higher subsequent rates of behavior problems that non-handicapped peers.

- Children with motoric impairments are frequently judged less approachable than non-handicapped peers.

- Once children are determined to be motorically impaired, standard motor scales (and subscales) of developmental instruments are unlikely to be of use due to their generality, their inability to evaluate quality of movement, and their assumption of children's structural mobility and integrity.

Gallagher and Cech (in press) argue that no good assessment scale yet exists to measure the motoric performance of motorically handicapped preschoolers. To be valid, such a scale would have to measure, in a qualitative fashion, muscle tone, muscle strength, postural reactions, and structural mobility and integrity. As mentioned earlier, Robinson (in press) also argues that once determination of motoric impairment has been made, a process-oriented assessment is likely to be of most use. This is an assessment of children's performance during a number of modified instructional sequences.

SUMMARY

Assessment of handicapped preschoolers has, to date, generated far more activity than outcomes. I have witnessed numerous instances of assessments occurring with no clear purpose, and too little understanding of the developmental characteristics of the children being assessed. I have also seen useful assessment efforts, when there have been clearly stated and widely accepted purposes for assessment. To accomplish this goal, all participants in the intervention process must become involved in the assessment process. This includes psychologists and therapists, but it also includes teachers, aides, and parents. I also perceive that the discipline of early childhood special education has witnessed enough instruments being developed for purposes of classifying children by handicapping condition. We must move forward and develop more measures that help us determine how and when we should teach all needy young children, including children at-risk, children with general developmental delays, and children with demonstrated handicapping conditions.

Assessing Environmental Provisions For Young Handicapped Children

Thelma Harms and Richard M. Clifford
University of North Carolina
Chapel Hill, North Carolina

RATIONALE UNDERLYING THE EARLY CHILDHOOD ENVIRONMENTAL RATING SCALE (ECERS)

The ECERS was developed to be used as a quality assessment in a variety of early childhood group settings for the education and care of children birth to six-years-old including full day care programs, part-day preschool programs, kindergartens, and compensatory programs such as Head Start. To that end, basic dimensions that cut across all early childhood group settings were selected. The instrument was meant to be used to follow one group at a time. The key question guiding selection of items was "What do children need in any group setting in order to make developmentally appropriate gains physically, socially, intellectually, and emotionally?"

In order to describe settings where children can make good progress in these basic four aspects of development, a broad definition of environment was assumed. Environment was conceived as including organization of space, equipment and activities to stimulate development, adult supervision and interaction, and time schedule.

There are 37 items in the scale, organized under 7 categories: Personal Care Routines, Furnishings and Display, Language-Reasoning Experiences, Fine and Gross Motor Activities, Creative Activities, Social Development, and Adult Needs. Each item is presented on a 7-point scale, with descriptors for four levels of quality: 1 (inadequate), 3 (minimal), 5 (good), and 7 (excellent). A score of 1 generally means no provision is made in either the physical environment or materials on that dimension. A score of 3 denotes minimal materials, space, or supervision provided. A score of 5 requires adequate materials in space set aside for the activity with supervision. A score of 7 requires that all attributes of a score of 5 be present plus provision for encouraging independent use by the children and evidence of teacher planning for individual differences. The midpoint ratings (2, 4, and 6) are used when all of the lower descriptor requirements are met but only part of the higher descriptors are present.

Items were written keeping each strand of development in mind. For example:

PHYSICAL DEVELOPMENT

Goals: To provide for proper nutrition, rest, and personal hygiene through routine care.

To provide time, space, equipment and supervision for physical exercise.

- routine care to promote health (nutrition, nap/rest, diapering/toileting)
- space outdoors and indoors for gross motor play
- safe and suitable equipment
- supervision for safety
- interaction to encourage productive play
- time in schedule for gross motor play

SOCIAL DEVELOPMENT

Goal: To promote positive social interaction between staff and child and among children by providing alternatives to conflict and competition.

- independence (upper end of routine care items and space arrangement)
- positive interaction with adults (upper end of tone item, greeting/departing, meals/snacks)
- positive interaction with peers (upper end of tone item)
- space and time to be alone
- appropriate grouping
- cultural awareness

INTELLECTUAL DEVELOPMENT

Goals: To develop language and reasoning skills through interaction.
To provide stimulating play materials both outdoors and indoors.

- receptive language item
- expressive language item
- equipment and activities to help reasoning
- informal use of language with children
- fine motor activities
- creative activities (art, music, dramatic play, etc.)
- supervision (gross motor and creative activities)
- schedule

EMOTIONAL DEVELOPMENT

Goals: To develop a positive self-image.
To develop appropriate dependence on and independence from adults.

- routine care items which contain pleasant adult-child interaction around routines at upper end
- display
- cultural awareness
- independent use of materials (upper end of activities items)
- tone
- supervision items

A second question used to select items was, "How should teachers structure environment to best meet children's developmental needs?" Items relating to room arrangement, furnishings and display, schedule, and grouping were generated in response to this question.

A third question guiding item selection was, "What do teachers themselves need in the setting in order to do a professional job?" The adult needs category was developed in response to this question.

Some items were generated from specific environmental research and writing. For example: Furnishings for relaxation and comfort (#8) and space to be alone (#28) were based on the need for softness and privacy pointed out in the work of Prescott and her associates. Other items were based on current cultural views in American education. For example, cultural awareness (#31) was written to affirm the importance of unbiased racial and sexual attitutdes. Similar statements stressing the importance of unbiased cultural attitudes can be found in the Head Start guidelines, the National Association for the Education of the Young Child (NAEYC) Accreditation Criteria and the Child Development Associate Credential. Another issue of current concern, interaction with parents, is included in several of the routine care items and in provisions for parents (#37).

The basic educational orientation in this scale is that:

1. Children learn through their activity, through what they do, see, hear, experience, and think. They are active learners.
2. Children also learn through interaction with their parents, teachers and other adults, as well as through interaction with other children. Adult interaction, both verbal and nonverbal, is an important source of children's learning because it focuses children's attention, provides appropriate language, reinforces behavior, and stimulates thought. Therefore, planning for interaction and productive use of appropriate play and routine activities is an important part of the teacher's role.
3. A physical environment that is organized and functions so that children can be maximally independent and successful allows more time for productive interaction, discussion, and enjoyment.
4. Children need emotional warmth, softness, protected space, and predictable routines to feel secure and protected.
5. In order to have good environments for children, the needs of the adults in that environment must also be met.

The scale was developed in close communication with field-based staff supervising day care centers and preschool programs. The items were shaped by constant field testing and pragmatic feedback. In addition, expert critiques were commissioned from 7 recognized experts in the field. These critiques covered the range of items, the descriptors under each level of quality in the items, and a rating of the importance of each item to good day care.

References

Jones, E., & Prescott, E. "Dimensions of Teaching Learning Environments." Vol. II. Focus on Day Care. Pasadena, CA: Pacific Oaks College, 1978.

The 37 Items of the
EARLY CHILDHOOD ENVIRONMENT RATING SCALE

PERSONAL CARE ROUTINES

1. Greeting/departing
2. Meals/snacks
    OR ◆2. (Infants)
3. Nap/rest
4. Diapering/toileting
5. Personal grooming

FURNISHINGS AND DISPLAY FOR CHILDREN

6. For routine care
7. For learning activities
    OR ◆7. (Infants)
8. For relaxation and comfort
9. Room arrangement
    OR ◆9. (omit for Infants)
10. Child related display
    OR ◆10. (Infants/toddlers)

LANGUAGE-REASONING EXPERIENCES

11. Understanding of language
12. Using language
13. Using learning concepts
14. Informal use of language
    OR ◆14. (Infants/toddlers)

FINE AND GROSS MOTOR ACTIVITIES

15. Perceptual/fine motor
16. Supervision: fine motor activities
17. Space for gross motor
18. Gross motor equipment
19. Scheduled time for gross motor activities
20. Supervision: gross motor activities

CREATIVE ACTIVITIES
(omit for Infants)

21. Art
22. Music/movement
23. Blocks
24. Sand/water
25. Dramatic play
26. Schedule
27. Supervision: creative activites

SOCIAL DEVELOPMENT

28. Space to be alone
29. Free play
30. Group time
    OR ◆30. (omit for Infants)
31. Cultural awareness
32. Tone
33. Provisions for exceptional children

ADULT NEEDS

34. Adult personal area
35. Opportunities for professional growth
36. Adult meeting area
37. Provisions for parents

Thelma Harms & Richard M. Clifford
Teachers College Press
1980

Comparison of preschool environments for handicapped and nonhandicapped children

Donald B. Bailey, Jr., PhD
Clinical Assistant Professor
Division of Special Education
School of Education
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Richard M. Clifford, PhD
Director of Evaluation
Frank Porter Graham Child Development Center
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Thelma Harms, PhD
Director, Curriculum Development
Frank Porter Graham Child Development Center
Clinical Assistant Professor
School of Education
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

PROGRAMS for young, handicapped children have been described as "environmentally barren, cold, and sterile" (Olds, 1979, p. 91). This description suggests that early childhood special education teachers either are not aware of the importance of the learning environment or do not translate their awareness into appropriate environmental provisions.

Given the demonstrated positive effects of improving environments for older, handicapped children (e.g., Horner, 1980; Levy & McLeod, 1977), it is surprising that so few empirical investigations of environments for handicapped preschoolers have been conducted. Rogers-Warren and Wedel (1980), in a review of the ecology of preschool classrooms for the handicapped, reported that research on the physical aspects of preschools for handicapped children is extremely limited. Research on preschool environments has generally investigated environments provided nonhandicapped youngsters or has focused on a limited number of environmental dimensions (e.g., Adams, Tallon, & Stangl, 1980; Frankel,

TECSE, 1982, 2(1), 09–20
0271-1214/82/0021-0009$2.00
© 1982 Aspen Systems Corporation

Freeman, Ritvo, & Pardo, 1978; Krantz & Risley, 1977; Siegel, 1977; Wachs, 1979).

No data have been published that describe the environments typically provided handicapped preschoolers or that compare them with the preschool environments typically provided nonhandicapped children. This information is needed to plan training and intervention efforts that maximize the positive effects of environment on the behavior and development of young, exceptional children. The study described in this article represents an initial attempt to gather such information by using a comprehensive rating scale to describe and compare environments provided handicapped and nonhandicapped preschoolers.

STUDY METHOD

Sample description

The sample of programs for handicapped children used in the study comprised 25 classrooms. These programs were selected from lists provided by the North Carolina State Departments of Public Instruction and Human Resources. The criteria used for selection of the sample included the following: (a) classrooms serving children 2–5 years old; (b) programs in which a majority of children were handicapped; and (c) facilities within a day's drive of the university. Of the 25 classrooms selected, 16 (64%) served children primarily classified in the moderate to profound range of developmental delay, and 9 (36%) served children primarily classified in the mild to moderate range of developmental delay. All of the classrooms were center-based programs with varying degrees of parent involvement. Most programs (78%) included a full-time (at least 8 hours) day care component in addition to instructional programming. The mean total program length was 8.4 hours; the mean instructional (planned) time was 5.6 hours. One program was part of a residential center; one program was a mainstreamed setting. Of the classrooms, 80% were certified to receive federal funds for the care and education of children from low-income families.

The sample of programs for nonhandicapped children consisted of 56 classrooms in day care centers in North Carolina and St. Louis, Missouri. Of the 56 classrooms, 25 were in 17 centers that were members of the Child Day Care Association of St. Louis, a large association of centers receiving United Fund support in the metropolitan St. Louis area. Those centers were chosen by the education coordinator of the association as representative of a wide range of types of day care settings in the area. The remaining 31 classrooms were from 12 day care centers in central North Carolina chosen to be representative of centers in that area. The criteria used for selection of the sample included the following: (a) classrooms serving children 2–5 years of age, (b) programs designed primarily for nonhandicapped children, (c) facilities licensed by the appropriate state agency to provide day care, and (d) facilities within a day's drive of either Chapel Hill, North Carolina or St. Louis, Missouri.

The programs were predominantly (95%) full-day programs serving children from varying socioeconomic backgrounds. All programs claimed to have an educational component as part of their overall care of young children. One program was associated with a Montessori school, and one was a half-day program in a university setting. Eighty-six percent were certified to receive federal funds for the care of children from low-income families.

Instrument description

The instrument used to assess the environment in programs for both handicapped and nonhandicapped children was the Early Childhood Environment Rating Scale (ECERS; Harms & Clifford, 1980). The ECERS was designed to give an overall picture of the environment for children and adults in preschool settings, including the use of space, materials, and activities to enhance children's development, the daily program schedule, and the supervision of children. The scale consists of 37 items organized into seven subscales: (1) Personal Care Routines, (2) Furnishings and Display, (3) Language-Reasoning Experiences, (4) Fine and Gross Motor Activities, (5) Creative Activities, (6) Social Development, and (7) Adult Needs. The scale was initially developed for use in preschool programs (day care, Head Start, nursery school) for predominantly nonhandicapped children.

Each of the 37 items of the ECERS is scored on a scale from 1 (Inadequate) to 7 (Excellent); observable descriptions are provided for ratings of 1, 3, 5, and 7. A score of 1 generally means that no provision is made in the physical environment or for materials on that dimension. A score of 3 denotes minimal materials, space, or supervision provided on that dimension. A score of 5 indicates that adequate materials are provided in a space set aside for the activity with supervision. A score of 7 requires that all attributes of a score of 5 be present as well as provision for encouraging independent use by the children and evidence of teacher planning for individual differences. Two examples of scale items are displayed in Figure 1.

Each of the 37 items of the ECERS is scored on a scale from 1 (Inadequate) to 7 (Excellent); observable descriptions are provided for ratings of 1, 3, 5, and 7.

Validity of the ECERS was established using two methods. During the development of the scale, a panel of seven nationally recognized experts in the early childhood field were asked to review the items and rate their importance to programs for young children. In all, 78% of the ratings of individual items by all panel members were the highest rating possible. Only 1% of the ratings indicated low importance. Based on these results, 1 of the original 38 items was dropped, and others received minor modification. A study that compared two separate ratings using the scale with independent ratings of the same classrooms ($N = 18$) by outside experts showed rank-order correlations of .74 and .70.

Several reliability studies have shown that trained raters can be expected to use the scale consistently. Interrater reliability correlation coefficients range from .79 to .90 when total classroom scores are compared. Test-retest reliability in 28 classrooms with a 2-week interval between ratings was measured as .96 for the total scale score. Internal consistency measures indicate that although the scale as a whole is satisfactory (.86 standardized alpha), the subscale scores should be interpreted with caution (.44 to .81 standardized alphas).

Procedure

Raters were trained using a standard format. They were asked to read the scale instructions and items carefully. Then each was shown a slide and tape presentation entitled "Day Care Environment" (Harms & Peterson, 1977) as background information. Each trainee observed a classroom for approximately two hours and attempted to complete the scale on that classroom. After the observations were made, the trainees and trainer reviewed ratings on each item and discussed reasons for any differences. The group reached a consensus on the most appropriate rating. Strategies for interviewing teachers were reviewed. A second observation was scheduled within a few days. The procedures for rating and discussion were repeated. If this second set of ratings met a criterion of 80% agreement, the rater was considered trained. If not, the process of rating and discussion continued until the 80% criterion was met.

Each program was contacted in advance to

	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
Room arrangement	No interest centers defined. Room inconveniently arranged (Ex. traffic patterns interfere with activities). Materials with similar use not placed together.		One or two interest centers defined, but centers not well placed in room (Ex. quiet and noisy activities near one another, water not accessible where needed). Supervision of centers difficult, or materials disorganized.		Three or more interest centers defined and conveniently equipped (Ex. water provided, shelving adequate). Quiet and noisy centers separated. Appropriate play space provided in each center (Ex. rug or table area out of flow of traffic). Easy visual supervision of centers.		Everything in 5 plus centers selected to provide a variety of learning experiences. Arrangement of centers designed to promote independent use by children (Ex. labeled open shelves, convenient drying space for artwork). Additional materials organized and available to add to or change centers.
Informal use of language	Language outside of group times primarily used by staff to control children's behavior and manage routines.		Staff sometimes talks with children in conversation, but children are asked primarily "yes/no" or short answer questions. Children's talk not encouraged.		Staff-child conversations are frequent. Language is primarily used by staff to exchange information with children and for social interaction. Children are asked "why, how, what if" questions, requiring longer and more complex answers.		Staff makes conscious effort to have an informal conversation with each child every day. Staff verbally expands on ideas presented by children (Ex. adds information, asks questions to encourage child to talk more).

Figure 1. Two sample items from the *Early Childhood Environment Rating Scale*. Reprinted by permission of the publisher from Thelma Harms and Richard M. Clifford, *Early Childhood Environment Rating Scale*. (New York: Teachers College Press, copyright 1980 by Thelma Harms and Richard M. Clifford. All rights reserved.), p. 17, 21.

seek permission to observe and to determine a date for observation. All classrooms agreed to participate. On the agreed upon date, the trained observer arrived at the beginning of school and remained for 3–4 hours. Items on the ECERS were rated based on observations and teacher interviews according to the administrative instructions.

RESULTS OF THE STUDY

Two questions were addressed in the analysis of the data: (1) Are classrooms for handicapped preschoolers generally providing environments that are different from those provided nonhandicapped preschoolers? and (2) On what specific environmental dimensions

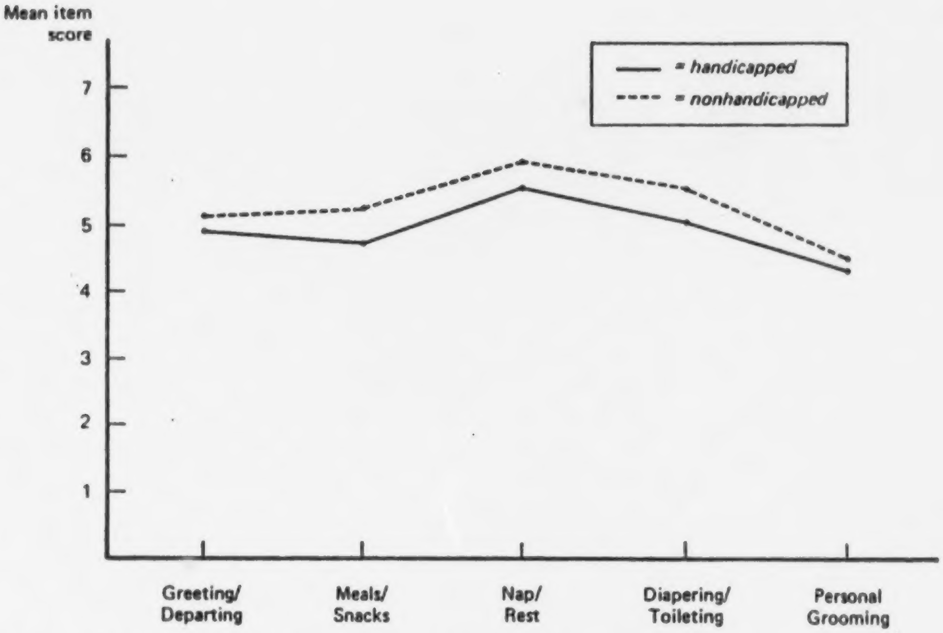


Figure 2. Mean ratings of handicapped and nonhandicapped programs on personal care routine items.

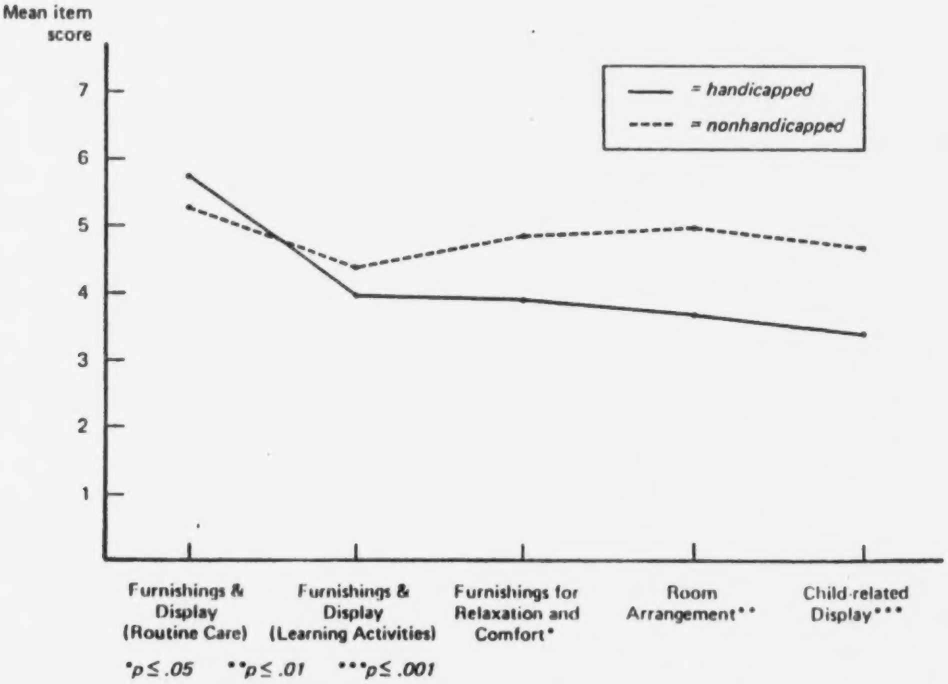


Figure 3. Mean ratings of handicapped and nonhandicapped programs on furnishings and display items.

do programs for handicapped and nonhandicapped preschoolers differ?

The first question (concerning overall differences in environment) was addressed by comparing total ECERS scores for handicapped and nonhandicapped programs. The mean total score for nonhandicapped classrooms was 186.4 (out of a possible 259); the mean total score for handicapped classrooms was 163.25. This represents a substantial difference in overall environmental ratings ($t = 3.46$, $df = 78$, $p = .001$) and warrants further examination of items to determine specific sources of variability.

The second question (concerning analysis of specific dimensions to determine areas of difference) was addressed in two ways: item-by-item comparisons and a discriminant analysis. In the item-by-item comparison, mean scores for handicapped and nonhandicapped classrooms were determined for each item. The relationship between these means is displayed for each item in Figures 2–8.

Although a number of these comparisons could be expected to differ significantly by chance, t-tests were computed for each item because of the exploratory nature of this investigation. Means, standard deviations, and t-values for each comparison are displayed in Table 1. Twelve items proved to differ significantly ($p \leq .05$) in favor of the nonhandicapped programs: furnishings for relaxation and comfort, room arrangement, child-related display, space for gross motor activities, scheduled time for gross motor activities, art, blocks, sand and water, dramatic play, and cultural

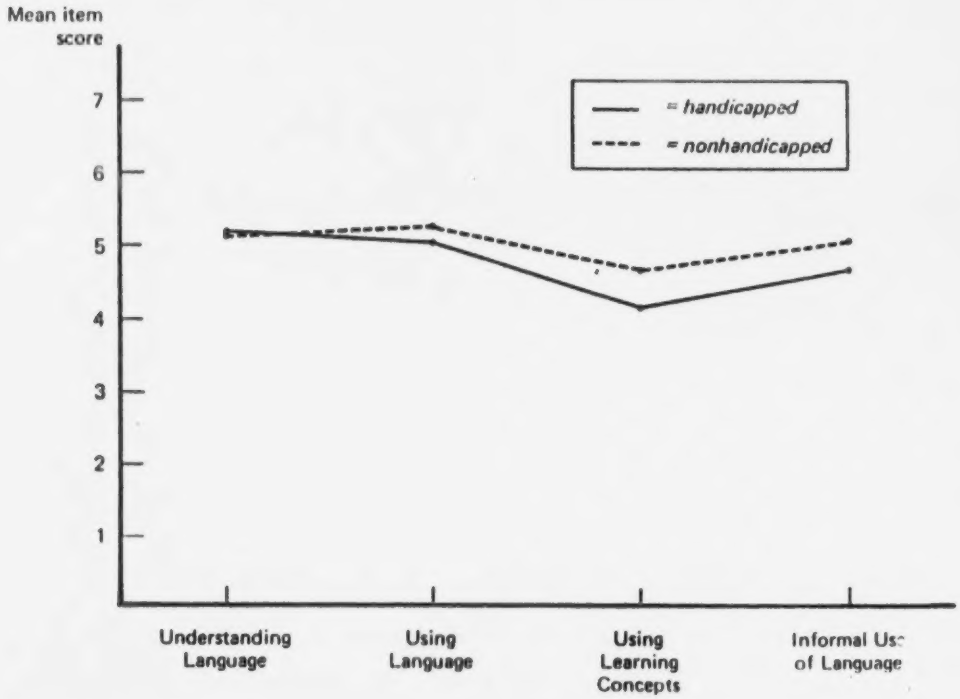


Figure 4. Mean ratings of handicapped and nonhandicapped programs on language and reasoning items.

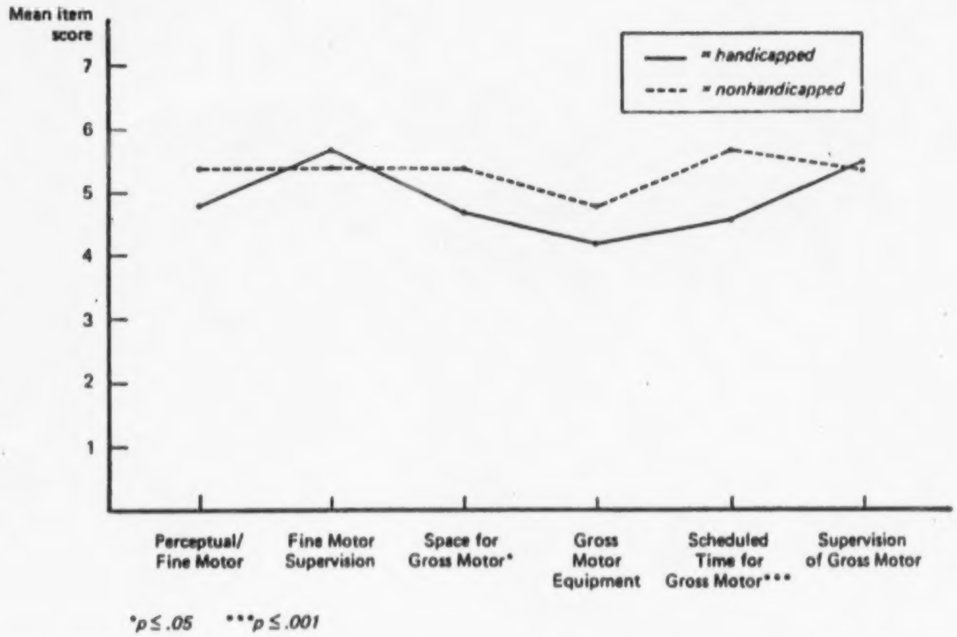


Figure 5. Mean ratings of handicapped and nonhandicapped programs on fine and gross motor items.

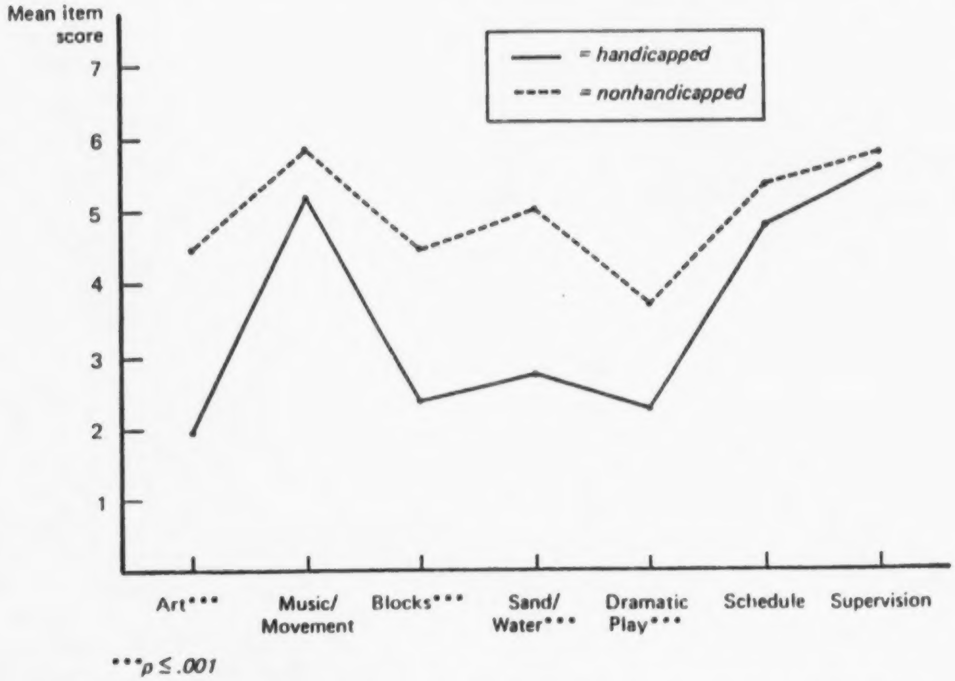
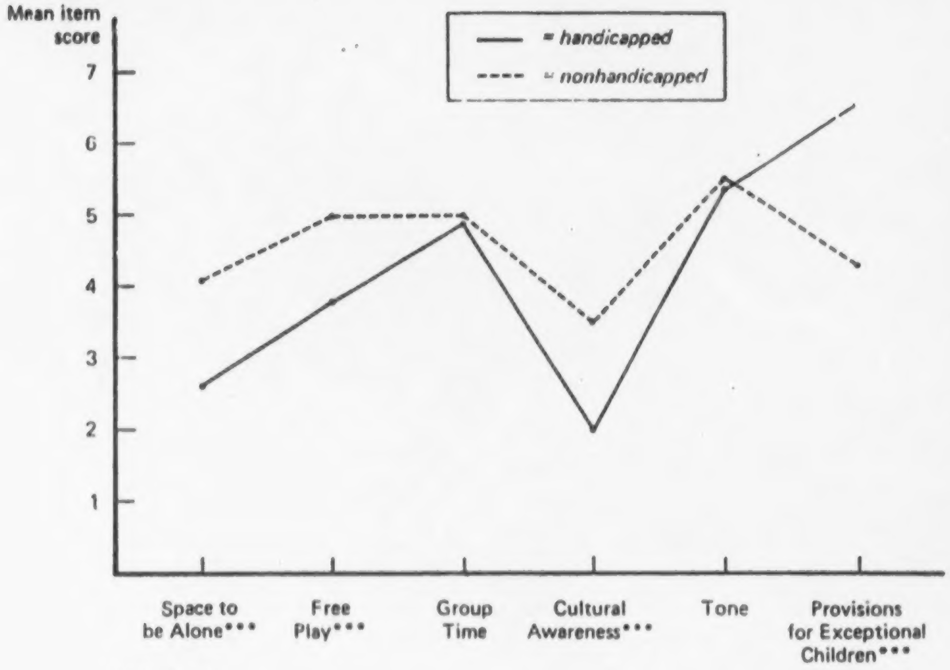


Figure 6. Mean ratings of handicapped and nonhandicapped programs on creative activities items.



***$p \leq .001$

Figure 7. Mean ratings of handicapped and nonhandicapped programs on social development items.

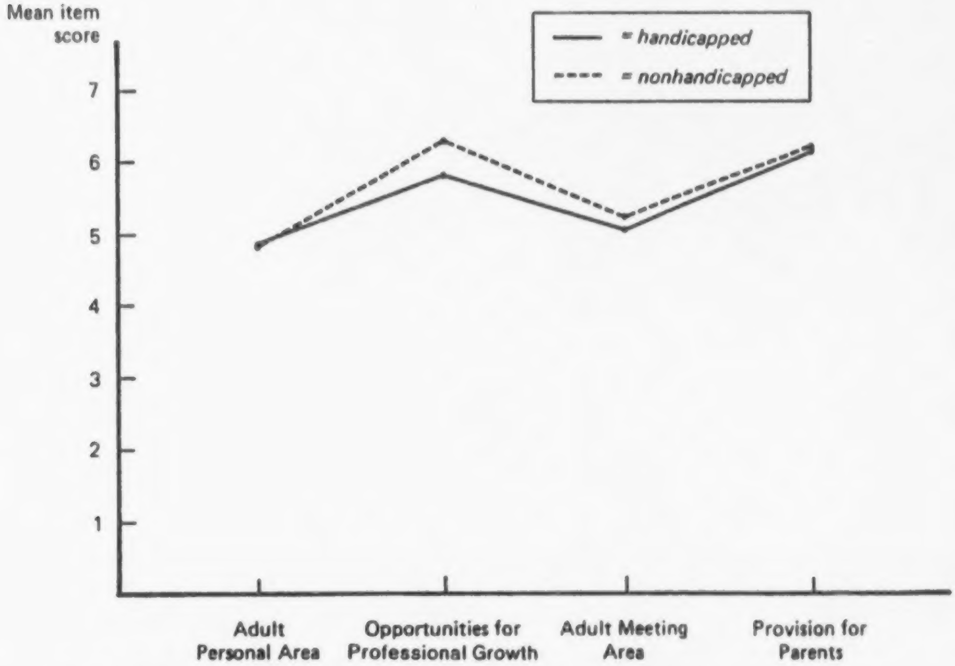


Figure 8. Mean ratings of handicapped and nonhandicapped programs on adult needs items.

Table 1. Comparison of scores of handicapped and nonhandicapped preschool classrooms on the *Early Childhood Environment Rating Scale*

	Handicapped			Nonhandicapped			
Scale item	$\bar{X}$	S_x	n	$\bar{X}$	S_x	n	t^a
Greeting and departing	4.80	1.22	25	5.00	1.06	56	.71
Meals/snacks	4.56	1.08	25	5.20	1.43	56	2.20
Nap/rest	5.52	1.20	23	5.93	1.54	55	1.19
Diapering/toileting	4.92	1.68	25	5.46	1.39	56	1.41
Personal grooming	4.40	1.96	25	4.50	1.04	56	.24
Furnishings (routine)	5.72	1.40	25	5.23	1.35	56	−1.47
Furnishings (learning)	3.92	1.58	25	4.36	1.41	56	1.19
Furnishings (relaxation)	3.9	1.63	25	4.84	1.36	56	2.46*
Room arrangement	3.63	1.88	24	4.96	1.36	56	3.21**
Child-related display	3.36	1.22	25	4.66	1.12	56	4.55***
Understanding language	5.16	1.34	25	5.11	1.36	56	−.16
Using language	5.04	1.54	25	5.27	1.47	56	.62
Using learning concepts	4.16	1.55	25	4.68	1.35	56	1.45
Informal use of language	4.64	1.47	25	5.05	1.18	56	1.24
Perceptual/fine motor	4.80	1.47	25	5.32	1.29	56	1.53
Supervision	5.64	1.35	25	5.39	1.07	56	−.81
Space for gross motor	4.68	1.35	25	5.36	1.05	56	2.23*
Gross motor equipment	4.16	1.91	25	4.79	1.16	56	1.52
Scheduled time for gross motor	4.56	1.12	25	5.63	.93	56	4.15***
Supervision of gross motor	5.48	.82	25	5.32	.72	56	−.83
Art	1.92	1.32	24	4.43	1.88	56	6.84***
Music/movement	5.16	1.62	25	5.82	1.22	56	1.82
Blocks	2.38	1.44	24	4.48	1.45	56	5.99***
Sand/water	2.71	1.65	24	5.00	1.80	56	5.53***
Dramatic play	2.25	1.70	24	3.70	1.09	56	3.84***
Schedule	4.80	1.22	25	5.32	1.24	56	1.76
Supervision of creative activity	5.58	.88	24	5.73	1.04	56	.92
Space to be alone	2.60	1.32	25	4.02	1.23	56	4.55***
Free play	3.76	.88	25	4.95	1.07	56	5.24***
Group time	4.83	1.09	24	4.98	1.31	56	.53
Cultural awareness	2.00	1.29	25	3.48	1.43	56	4.61***
Tone	5.32	1.22	25	5.43	1.06	56	.39
Provisions for exceptional children	6.50	1.06	24	4.23	2.06	56	−6.03***
Adult personal area	4.84	2.58	25	4.82	1.76	56	−.03
Opportunities for professional growth	5.80	1.71	25	6.27	1.09	56	1.26
Adult meeting area	5.04	2.42	25	5.20	1.20	56	.31
Provision for parents	6.12	1.33	25	6.13	1.16	56	.02
Total	163.25	27.48	24	186.04	25.76	56	3.46***

[a] For unequal variances.

*$p \le .05$.

**$p \le .01$.

***$p \le .001$.

40

awareness. As expected, one item, provisions for exceptional children, was significantly different in favor of handicapped preschool classrooms.

To determine those items making the greatest contribution to the overall difference between handicapped and nonhandicapped programs, a discriminant analysis was conducted. The purpose of discriminant analysis is "to locate a more parsimonious subset of variables which can discriminate nearly as well as, if not better than, the full set" (Klecka, 1980, p. 60). Discriminant analysis selects the item that best discriminates between the two groups; additional items are then selected in a stepwise fashion until the selection of another item would not significantly add to the discriminating power of the existing variables. Wilks' Lambda is used as the statistical test to determine item selection. Six items were identified as a result of this process, in the following order: (1) blocks, (2) provisions for exceptional children, (3) art, (4) space to be alone, (5) scheduled time for gross motor activities, and (6) cultural awareness. Wilks' Lambda for these six variables was .288 ($p \leq .001$).

DISCUSSION

Limitations of the study

The results of this investigation should be interpreted with caution for several reasons. First, these data may not be generalizable to all handicapped and nonhandicapped preschool programs in this country. Classrooms in this study were not randomly selected; nor were they selected on the basis of any variables that might ensure their representativeness. The authors' collective experience with young children, however, suggests that the programs studied are generally representative of those currently available in North Carolina.

Second, the statistical analysis of items must be interpreted with caution. A more appropriate procedure would have been to predetermine items for which it was expected that differences might be found and then apply the appropriate statistical procedure. Because of a lack of descriptive data on preschool environments, however, it was difficult for the authors to speculate on any basis other than their own guesses based upon experience. Thus these data should be viewed as exploratory in nature and suggestive of environmental dimensions that should be put to a more rigorous test in future investigations.

Finally, the ECERS may not be entirely appropriate for rating the environments provided handicapped children. Although the general dimensions addressed are considered appropriate for all children, the scoring criteria for some items may not reflect the extent to which a program is meeting the needs of more severely impaired children. For example, the meals/snacks item should address the use of appropriate feeding techniques and adaptive equipment for physically handicapped children. Furthermore, other dimensions may be important to measure in handicapped children's programs: the availability and coordination of resource and therapy services, the presence of nonhandicapped peers, and the use of augmentative communication devices.

Study findings

Despite the study's limitations, the data obtained provide an initial basis for discussing issues to be considered in planning environments for young, handicapped children. An analysis of total scores on the ECERS indicates

---

An analysis of total scores on the ECERS indicates that preschool environments for handicapped children consistently received lower ratings than did preschool environments for nonhandicapped children.

---

that preschool environments for handicapped children consistently received lower ratings than did preschool environments for nonhandicapped children. Further substantiation of consistent differences is shown in the general pattern of performance across items (see Figures 2–8). The relative pattern of environmental highs and lows appears to be quite similar for the two groups; however, programs for handicapped children consistently scored lower than programs for nonhandicapped children across most items. These data are disconcerting in light of the recognized importance of high-quality environments for skill acquisition and generalization, as well as the right of all children to live in nurturant environments in which they experience comfort, security, and enjoyment.

The finding that handicapped programs receive lower ratings than nonhandicapped programs raises the question of whether these programs are actually inferior environmentally or whether classrooms for handicapped children simply differ from those provided nonhandicapped children due to the nature of the exceptional needs of the children they serve. Item-by-item analysis of performance patterns indicates that handicapped classrooms scored highly in some environmental areas but not in others. For example, handicapped and nonhandicapped programs generally did not differ significantly in the quality of personal care routines (see Figure 2), language-reasoning experiences (see Figure 4), most fine and gross motor activities (see Figure 5), and adult needs (see Figure 8). The environmental dimensions on which differences were most pronounced were those associated with room arrangement for interest centers and relaxation and comfort (see Figure 3), creative activities (see Figure 6), and social development (see Figure 7).

For example, in art activities, handicapped programs (mean score of 1.9) had few art materials available. When materials were available, there was often little free choice in art projects. In blocks, handicapped programs (mean score of 2.4) generally had few blocks and accessories and no special block area set aside for either play or storage. Very few programs organized storage areas to encourage independent use (e.g., pictures on shelves to show where blocks belong). In provisions for sand and water play, handicapped programs (mean score 2.7) typically provided limited access to these materials. In fact, 37.5% of the classrooms had no provisions for sand or water activities or materials at all. Dramatic-play areas (mean score of 2.25) were either nonexistent (54%) or generally focused on housekeeping roles, with few provisions for dramatic play involving transportation, work, or adventure. More than 75% of the handicapped children's classrooms had no space specially set aside for children to be alone. Only 36% had a planned "cozy" area (with a rug, cushions, child-sized rocker, or other furniture) regularly available to children.

Whether these differences between programs are appropriate must be examined in detail in future studies. From one perspective it seems appropriate that such dimensions as creative activities should take a secondary role in programs for handicapped children. Given the developmental delays exhibited by these children, teachers should do all they can in the way of instructional planning to accelerate developmental progress. Furthermore, that children in handicapped programs are functioning at significantly lower developmental levels than those in typical day care settings may indicate that environments for these children should be different.

On the other hand, systematic arrangement of the environment is a part of instructional planning. Children learn many things from participating in such activities as sand and water play, dramatic play, art, and blocks. These activities are appropriate in varying forms for children functioning at substantially different developmental levels. Careful planning of these activities, combined with appropriate structure, can result in an efficient, effective, and—perhaps most important—enjoyable learning environment for children. Further, if movement to less restrictive environments is viewed as an important goal for young, exceptional children, it seems critical that these children be provided with activities and materials that will best prepare them to make that transition.

This article raises serious questions about the normalcy and adequacy of environments provided by preschool programs for handicapped youngsters. Although these programs generally make adequate provisions for routine care and structured learning experiences, appropriate activities and materials for relaxation, enjoyment, and skill generalization are not as apparent. An important issue for future investigation is the identification of the functions such activities as blocks and water play serve for all children. Addressing this issue should help educators determine if preschool programs for handicapped children are providing alternative activities that still serve these important functions.

REFERENCES

Adams, G.L., Tallon, R.J., & Stangl, J.M. Environmental influences on self-stimulating behavior. *American Journal of Mental Deficiency*, 1980, *85*, 171–175.

Frankel, F., Freeman, B.J., Ritvo, E., & Pardo, R. The effect of environmental stimulation upon the stereotyped behavior of autistic children. *Journal of Autism and Childhood Schizophrenia*, 1978, *8*, 389–394.

Harms, T., & Clifford, R.M. *Early childhood environment rating scale*. New York: Teachers College Press, 1980.

Harms, T., & Peterson, M. *Day care environment*. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center, 1977. (Slide and tape presentation)

Horner, R.D. The effects of an environmental "enrichment" program on the behavior of institutionalized profoundly retarded children. *Journal of Applied Behavior Analysis*, 1980, *13*, 473–491.

Klecka, W.R. *Discriminant analysis*. Beverly Hills, Calif.: Sage Publications, 1980.

Krantz, P., & Risley, T.R. Behavior ecology in the classroom. In K.D. O'Leary & S.G. O'Leary (Eds.), *Classroom management: The successful use of behavior modification* (2nd ed.). New York: Pergamon Press, 1977.

Levy, E., & McLeod, W. The effects of environmental design on adolescents in an institution. *Mental Retardation*, 1977, *15*, 28–32.

Olds, A.R. Designing developmentally optimal classrooms for children with special needs. In S.J. Meisels (Ed.), *Special education and development*. Baltimore: University Park Press, 1979.

Rogers-Warren, A., & Wedel, J.W. The ecology of preschool classrooms for the handicapped. *New Directions for Exceptional Children*, 1980, *1*, 1–24.

Siegel, R.K. Stimulus selection and tracking during urination: Auto-shaping directed behavior with toilet targets. *Journal of Applied Behavior Analysis*, 1977, *10*, 255–265.

Wachs, T. Proximal experience and early cognitive-intellectual development: The physical environment. *Merrill-Palmer Quarterly*, 1979, *25*, 3–41.

ECERS Special Needs Items

1. Individualization: Refers to the extent to which the adult modifies tasks, activities, levels of assistance and reinforcement according to the needs and abilities of each child.

1	2	3	4	5	6	7
-Little or no individualization same activities, procedures, schedule, environment and consequences for all children (Ex. child in wheelchair can't reach table; only verbal instructions given to hearing impaired child). -Children often fail tasks or cannot participate in ongoing activities. -Children dealt with as whole group most of a day.		-Some individualization provided (Ex. separate toileting scheduled for child being toilet trained). -Adult helps children succeed by providing activities that are too simple or giving inappropriate assistance (Ex. teacher moves child's hands in art project rather than letting him do own work). -Children with similar needs work in small groups part the day.		-Much individualization provided in formal learning and routine. -Children participate successfully in tasks and activities that appropriately challenge their abilities. -One-to-one activities provided, in addition to small group work.		-Objectives for individual children are incorporated into free play as well as into formal learning times. -Adult uses interactions with children, room arrangement, materials and schedule to meet individual needs throughout the day (Ex. raised picture labels on toy shelves for visually impaired child; teacher signs throughout day, so hearing impaired child can fully participate). -Independent performance encouraged through environmental modification, appropriate activities and teaching strategies.

2. Multiple opportunities for learning and practicing skills: Refers to the extent to which the adult provides multiple opportunities for children to learn and practice the same skill, and the way in which these opportunities are presented.

1	2	3	4	5	6	7
-Adult generally does not provide repeated opportunities for learning and practicing skills.		-Adult provides repeated opportunities for learning and practicing skills; however, all opportunities occur in the context of structured activities.		-Repeated opportunities for learning and practicing skills; some instances of skill practice during naturally-occurring routines and events.		-Repeated opportunities for learning and practicing skills; frequent use of naturally-occurring routines and events to reinforce learning objectives.

ECERS Special Needs Items (cont.)

3. Engagement. Refers to the extent to which children are actively and appropriately involved with materials, people and activities.

1	2	3	4	5	6	7
-Little appropiate involvement. Much time spent in waiting for other children or adults, wandering or other non-directed behavior, stereotypic behavior, or inappropriate behavior.		-Many children are appropriately involved during adult-directed activities. (Ex. children pay attention during small group work). -Little appropriate involvement during routines and play times.		-Most children are appropriately invloved during adult-directed activities, routines and play times. -Adult interacts with children and provides attractive, developmentally appropriate materials to maintain active involvement (Ex. guides wandering child to attractive play area; helps non-mobile child change activity when ready).		-Transitions between activities, routine care and play times are arranged so children maintain involvement (Ex. children continue to play until next activity is ready). -Many alternative activities available for children to use independently or in small groups (Ex. child who loses interest in story-time allowed to build with Legos).

4. Peer interactions. Refers to the extent to which the adult promotes social interaction with peers by providing opportunities for peer interactions to occur and by prompting, modeling, and reinforcing peer-peer interactions.

1	2	3	4	5	6	7
-Adult makes no attempt to promote peer-peer interactions.		-Occasional efforts to promote peer-peer interactions; mostly structured as lessons, and not related to ongoing events (Ex. asking for and passing things done in a small group lesson but not during lunch).		-Many efforts to promote peer-peer interactions in structed lessons. -Some peer-peer interaction encouraged at natural times, fitting into the flow of events and capitalizing on the situations at hand.		-Frequent efforts to promote peer-peer interactions at natural times, fitting into the flow of events and capitalizing on the present situation.

ECERS Special Needs Items (cont.)

5. Promoting communication. Refers to the extent to which the adult serves as a communication model, responds to children's communicative attempts, and prompts communication use.

1	2	3	4	5	6	7
-Adult rarely promotes or encourages children's communication (Ex. rarely asks questions, ignores children's attempts to communicate). -Communication to children is primarily directive. -Adult does not provide communication options required by child's handicap (Ex. does not face hard of hearing child, does not provide communication board or signing to child who is unable to speak).		-Adult provides some communication activities during structured lessons, using alternative communication options, when necessary (Ex. communication board used during language lesson). -Adult occasionally promotes children's communication outside of structured lessons.		-Adult appropriately adjusts speech to children's level of understanding. -Communication with children includes much social conversation and information sharing (Ex. adult response to children and initiates additional dialogue). -Adults ask developmentally appropriate questions and attends to children's answers. -Alternative communication options used throughout the day.		-Adult frequently promotes children's communication. Wide use of variety of procedures; verbal descriptions of ongoing activities expanding children's talk, prompting or modeling communication, and reinforcing children's attempts to communicate. -Caregiver uses routines and activities throughout the day to reach appropriate goals for the children.

Sample ECERS ITEMS

Understanding of Language

1	2	3	4	5	6	7
Few materials present and little use of materials to help children understand language (Ex. no scheduled story time daily).		Some materials present, but either not available on regular basis (closed cabinets) or not regularly used for language development.		Many materials present for free choice and supervised use. At least one planned activity daily (Ex. reading books to children, story telling, flannel board stories, finger plays, etc.).		Everything in 5 plus teacher provides good language model throughout day (Ex. gives clear directions, uses words exactly in descriptions). Plans additional activities for children with special needs.

Art

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
Few art materials available; regimented use of materials (Ex. mostly teacher directed projects). Art materials not readily available for children to use as free choice activity.		Some materials, primarily drawing and painting, available for free choice, but major emphasis on projects that are like an example shown.		Individual expression and free choice encouraged with art materials. Very few projects that are like an example shown.		Variety of materials available for free choice, including three dimensional materials (Ex. clay, art dough). Attempt to relate art activities to other experiences.

SCRAMBLED ITEMS

Arrange the descriptions in order of their quality. Label the inadequate with a 1, minimal with a 3, good with a 5, and excellent with a 7. Remember that 5 contains the basic indicators of good early childhood education, and 7 adds some extras to those indicators to make the practice excellent.

Blocks.

(a) ________

Special block area with suitable surface (Ex. flat rug). Variety of large and small blocks and accessories, with storage organized to encourage independent use (Ex. with picture on shelves to show where blocks belong).

(b) ________

No special block area set aside, but space available for block play. Blocks and accessories enough for at least two children to play at one time.

(c) ________

Few blocks and accessories. Not enough space to play with blocks.

(d) ________

Special block area set aside out of traffic with convenient storage. Space, blocks, and accessories for three or more children at one time. Area available for at least one hour each day including some mornings and some afternoons each week.

Informal use of language.

(a) ________

Staff-child conversation is frequent. Language primarily used by staff to exchange information with children and for social interaction. Children are asked "why, how, what if" questions, requiring longer and more complex answers.

(b) ________

Staff sometimes talks with children in conversation, but children are asked primarily "yes/no" or short answer questions. Children's talk not encouraged.

(c) ________

Staff makes conscious effort to have an informal conversation with each child everyday. Staff verbally expands on ideas presented by children (Ex. adds information, asks questions to encourage child to talk more).

(d) ________

Language outside of group times primarily used by staff to control children's behavior and manage routines.

References on the Early Childhood Environment Rating Scale

Bailey, D.B., Clifford, R.M., & Harms, T. (1982). Comparison of preschool environments for handicapped and non-handicapped children. *Topics in Early Childhood Education*, *2*(1).

Goelman, H., and Pence, A.R. (in press). The impact of day care, family and individual characteristics on children's language development. In D. Phillips (Ed.), *Predicators of Quality Child Care*, NAEYC Monograph Series. Washington, DC: National Association for the Education of Young Children.

Goelman, H. (in press). A study of the relationships between structure and process variables in home and day care settings on children's language development. In A.R. Pence (Ed.), *Ecological Research with Children and Families: From Concepts to Methodology*. Teachers College Press.

Goelman, H., and Pence, A.R. (1987). The relationship between family structure and child development in three types of day care. In S. Kontos and D. Peters, (Eds.), *Advances in Applied Developmental Psychology, Volume 2*. Norwood, NJ: Ablex, 129-146.

Goelman, H., and Pence, A.R. (in press). Children in three types of day care: Daily experiences, quality of care and developmental outcomes. *Early Child Development and Care*.

Goelman, H. (1986). The facilitation of language development in family day care homes: A comparative study. *Early Child Development and Care*, Volume 25, Numbers 2 and 3, pp. 161-174.

Goelman, H., and Pence, A.R. (1986). Toward the ecology of day care in Canada: A research agenda for the 1980's. *Canadian Journal of Education*, Volume 10, No. 4, pp. 323-344.

Harms, T., & Clifford, R.M. (1983). Assessing preschool environments with the early childhood environment rating scale. *Studies in Educational Evaluation*, special issue, "Evaluation in Early Childhood Education," Bernard Spodek, Ed., *8*.

Harms, T., & Clifford, R.M. (1980). *The early childhood environment rating scale*. New York, NY: Teachers College Press.

Harms, T., & Clifford, R.M. (1984). *The family day care rating scale*. Chapel Hill, NC: Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill.

Harms, T. (1983). *Introduction to the early childhood environment rating scale*. Chapel Hill, NC: Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill. (Filmstrip with Viewer's Guide and training activities).

Kontos, S. & Stevens, R. (1985). High quality child care: Does your center measure up? Young Children, 40(2).

McCartney, K. (1984). Effects of quality of day care environment on children's language development. Developmental Psychology, 20(2).

McCartney, K., Scarr, S., Phillips, D., Grayck, S., & Schwarz, J.C. (1982). Environmental differences among day care centers and their effects on children's development. Chapter 6. In E.F. Ziegler & E.W. Gordon (Eds.), Day Care: Scientific and Social Policy Issues. Boston: Auburn House Publishing Co.

Reviews by R. Elardo and K. Telzrow of the early childhood environment rating scale. 9th Mental Measurements Yearbook. Lincoln: Buros Institute of Mental Measurement (1985).

Developing Functional Intervention Plans
The IEP and IFSP

Sarah Rule and Barbara Fiechtl
Utah State University
Logan, Utah

STEP BY STEP

IEP AND IFSP

Public Law 99-457 mandates that educational services be provided to preschool children aged three to five who have handicaps. In most states some services are already available. In those states where service providers have not been affiliated with educational agencies, the new law adds a requirement to service delivery: the provision of special education and related services to preschool children who have handicaps must be governed by an Individualized Education Plan (IEP). The IEP accomplishes several purposes (Weisenstein and Pelz, 1986, p. 53). It is a written document describing the services that will be provided to an individual student and the resources that will be committed to providing these services. Thus, it is the guideline for monitoring the school's compliance in providing a free and appropriate public education to a child with handicaps. It can also serve as a management plan for school personnel; if they review the IEP periodically, they can determine whether they are, in fact, providing the services to which they have committed. Finally, the IEP extends procedural protections to the child and family. It makes parents part of the team that defines services for the child, and they, too, can monitor whether services are delivered. Each of these will be discussed in greater detail below.

Why develop an IEP?

The obvious reason for developing an Individualized Education Plan is to comply with Public Law 99-457. The definition of an IEP is contained in a previous law, Public Law 94-142. Section 1401, (16) of that law defines special education as "specially designed instruction, at no cost to parents or guardians, to meet the unique needs of a handicapped child." Before such services can be initiated it is necessary to develop an individualized education program for each child. This is a written statement for each handicapped child; it is developed in a meeting by a team that includes (a) a representative of the school district who is qualified to provide or supervise special education services and has the authority to represent the local educational agency, (b) the parent(s), (c) the teacher, (d) the child, if the age and the child's handicapping condition make participation on the IEP team appropriate, and (e) other representatives of the educational agency or unit as is appropriate. A representative of the team that evaluated the child and determined his eligibility for special education should attend the first IEP meeting.

What is in the IEP?

According to the law, the IEP must contain several specific kinds of statements: (1) "a statement of the present levels" of the child's educational performance, (2) "a statement of annual goals including short term instructional objectives", (3) "a statement of the specific educational services to be provided to...(the child) and the extent to which...(the child) will be able to participate in regular educational programs", (4) "the projected date for initiation and the anticipated duration of such services", and (5) "appropriate objective criteria and evaluation procedures" for determining whether the child achieves the objectives. The IEP must be reviewed at least annually.

The IEP, then, is a very specific statement about the skills that school personnel will try to help the child achieve. It also states the resources to be committed: the personnel who will provide each type of service and how often each service will be provided. It should be noted that neither the school district nor the service personnel (teachers and therapists) are legally responsible if the child does not achieve the objectives; however, they are legally responsible for providing the services as stated in the IEP. Furthermore, it should be noted that each IEP is an individual document; there is a separate IEP for each child based on an assessment of his or her individual needs. The services provided must be appropriate to meet those needs. It is not always clear what appropriate means; that is sometimes a matter of interpretation. It is clear, however, that the services must represent a reasonable attempt to address the child's skill deficits.

How does one determine what skills should be addressed on the IEP?

The IEP must be developed before special education and related services begin. Obviously it must be based on extensive information about the individual child. This information generally comes from a variety of sources and addresses several areas of educational (or developmental) functioning. The school must not only provide educational services, but those other related services such as transportation and therapy (such as speech or occupational therapy) that are necessary for the child to "benefit from special education" (PL 94-142, Sec. 1401). Thus, the assessment must include information not only about the child's cognitive functioning, but also about his or her functioning in a number of other skill areas.

Generally, several different types of evaluations are conducted. Initial evaluations are conducted to determine whether the child is in need of special education. This evaluation generally includes normative referenced instruments. These instruments give information about the child's functioning compared to his or her chronological peers. For preschoolers, such instruments might include tests of intelligence, developmental scales or both. If there is a large discrepancy between the child's functioning and that of his or her chronological peers then it may be determined that he or she needs special education. The initial evaluation of the child, however, should include the results not only of developmental or psychological tests, but also evaluation in the areas of speech and language, motor skills and adaptive behavior medical evaluations. The information from these evaluations should describe the areas in which the child exhibits skill deficits. This information will be considered in the IEP meeting. The evaluators may make recommendations about goals for the child based on the results of testing. Information from these tests, however, is generally not sufficient for teachers to design specific instructional procedures appropriate to meet the child's needs. To do this, the teacher generally needs more detailed information.

Information on which to base instructional goals and objectives on a child's IEP is often obtained from two types of sources. The first source is the child's parents. Information from testing is frequently obtained in a very constrained set of circumstances: in a specific time and place and sometimes in the presence of people with whom the child is not well acquainted. It is helpful, then, to augment the information from tests with information from people who know the child well, specifically the parents. The parents know about the child's functioning in everyday situations at home and in the community. This information and their perspective on the deficiencies that most impair the child's overall functioning is critical. (More information about parents as members of the IEP team is included later in this paper).

The second source of information on which to base objectives is criterion-referenced tests which provide more detailed information about the child's functioning in various skill areas than can be obtained from a normative test. These may be commercially available tests such as the Brigance Inventory of Early Development (Brigance, 1978), the Uniform Performance Assessment System (White, Edgar, Haring, Affleck, Hayden and Bindersky, 1980), or the Evaluation Performance System for Infants and Young Children (Bricker and Gentry, 1985). They may be part of a curriculum such as the Curriculum and Monitoring System, (Casto, 1979) or the Program and Assessment Guide for Developmentally Disabled and Preschool Children, (Striefel and Cadez, 1983).

The tests can describe the child's performance, but they cannot tell how important the performance of various skills is to the child's life and everyday functioning. The members of the IEP team must make this judgment on behalf of the preschool child and develop programs to teach skills which are: (a) useful to the child, (b) applicable in everyday living, and (c) which will make a difference in the lives of both child and family. For example, few educators or parents would argue with the appropriateness of teaching toileting skills to a child who is physically capable of learning to control bladder and bowel functions. A child who does not have toileting skills requires constant attention and assistance and is sometimes excluded from participation in community activities such as swimming. However, there may be some disagreement among members of the team as to whether it is important for that same child to learn to put on a shirt with buttons as opposed to a tee-shirt. It may be that family members would be quite happy to let the child wear pull-overs and to address more difficult dressing skills in the future. Parents can contribute information about which skills are more or less important at a particular time in a child's life.

Each team member should contribute information to portray the child's strengths and weaknesses in various developmental areas. It is important that someone at the IEP meeting be prepared to convey information from professionals representing a variety of disciplines. This will help put the child's needs in perspective. A parent, for example, may be very concerned about a child's inability to say certain sounds. A speech therapist should have obtained information indicating whether the child's abilities are, in fact, similar to other children at his or her age level. He or she may suggest goals and activities that will facilitate the child's speech and language development. Similarly, an occupational therapist may have observed patterns of motor functioning which suggest that the child may need assistance in using small muscles. It is not necessary that every therapist and specialist who assessed the child be present at the team meeting, although it is often desirable to include those who represent disciplines in which the child has clear and apparent deficits. It is important, however, that the teacher or a representative of the educational agency be prepared to convey the information obtained by the specialist during assessments and their interpretation of the implications of these assessments on the child's needs for special education and related services. Information synthesized from all team members and parents should serve as the basis for stating the long term goals of the child.

IEP goals and objectives.

During the IEP meeting, team members will write goals and specific objectives to address each goal. These should be based upon the skills the child exhibits and be reasonable projections about the next skills that the child should attempt to learn.

Goals. The child's (and family's) needs should be prioritized and a goal written in each area of need. The annual goals are broad statements of the skills to be addressed over the year. They should reflect adaptive skills that will help the child to function in the future. For example, a goal might be, "Shaundrae will learn to dress and undress independently." Another goal might be, "Todd will learn to play with age-appropriate toys."

Objectives. Objectives are specific statements about the skills that the child will learn in the short term. They should state the skill, the conditions under which the skill will be exhibited, and the measurable criteria for determining that the skill has been acquired. For example, Shaundrae's first objective might be, "When Shaundrae is given a sock and told to put the sock on, she will put it on her foot, correctly and without help, on three consecutive days." Todd's first objective might be "When seated with an adult and another child and told to roll the truck, Todd will push the truck at least 12 inches toward the other child at least four times on three consecutive days." The list of objectives will generally begin with the easiest skill leading toward the accomplishment of the goal. When the initial objectives are accomplished, the teacher or therapist can add new ones without rewriting the educational plan and reconvening the team. If, however, as specific objectives are addressed, it becomes clear that the annual goals are not appropriate or that major changes are needed in the services provided to the child, it will be necessary to convene the team to make the appropriate revisions in the IEP. The law requires only that it be reviewed annually; however, a year is a long period in the life of a preschool child. Frequent review of goals and objectives, at least quarterly, will make them more functional in guiding the child's intervention.

When should the meeting be held?

The IEP meeting must be held before services are initiated. It must occur within 30 days of the initial evaluation when it was determined that the child was eligible for special education. It should be held at a time which is convenient for parents. This may be after working hours or on Saturdays or at other times when parents can be present (Powell, 1986). Some parents, especially single parents working in jobs that do not have benefits such as leave time, may find it impossible to leave work during school hours. Representatives of the educational agency must be prepared to accommodate their needs. Technically, the IEP meeting could be held without the parents if the school officials documented their attempts to reach them. However, they must attend the meeting (with an interpreter, if necessary to help them participate) in order to contribute. Their absence will be a detriment to the child, the team and the school in the long run, for they will not be able to assist in intervention about which they are uninformed.

What happens if IEP procedures are not followed?

Public Law 94-142 provides for procedural safeguards to assure that provisions in the law are followed. All records, including the IEP, must be available to parents and guardians at their request within a reasonable time after the request is made. They have to be notified if the educational agency proposes to begin or change special education and related services or if they request such services and the agency refuses to initiate or change them. They are to be notified in their native language. They must be given a chance to complain to the agency if they are not satisfied with placement or services. If the agency representatives and the parents cannot resolve their differences, parents can request a due process hearing. This hearing may be conducted by either the local or the state educational agency depending on state law, but it must be conducted by someone who is impartial; an impartial person is not a representative or employee of the service agency. If parents are not satisfied with the results of the hearing they can appeal to the state, and they can bring civil proceedings in a court of law. While differences between parents and school systems are being resolved, the child remains in his or her present placement. If parents have incurred legal expenses in resolving differences and they win the case, the school district must reimburse reasonable attorney's fees. Due process procedures are a poor substitute for good initial, and continuing, communication between parents and representatives of the school. That is why their participation as actual members of the IEP team is so critical. A good initial working relationship can prevent later grievances, wasted time, and expenses which could have been better spent in appropriate programming for the child.

Involving parents as members of the IEP team.

As already discussed, effective programming for a preschooler with handicaps will be enhanced only to the extent that parents are real rather than titular members of the IEP team. The extent to which other members of the team make efforts to facilitate parents' contributions is the extent to which the IEP meetings are useful in intervention rather than exercises to meet the letter of the law. Shaffer has developed guidelines for working with parents cited by Weisenstein and Pelz (1986, pp. 58-60). Several are discussed below.

First, it is important to recognize parents and children as individuals by using their names rather than addressing them as "you" or "your child." Second, while acronyms such as IEP, LEA, OT, or PT may convey meaning to professionals, they are not likely to be understood by people outside the field of special education. It is important to either avoid acronyms or to explain them to parents the first time they are used. Third, professionals should avoid overly general or overly interpretive terms that may provoke parents' anxiety. For example, it may be necessary to describe a child's disruptive actions in the preschool in order to develop a program for assisting the child. However, professionals need not describe the child as "emotionally disturbed" or "behavior disordered"; they may simply describe the child's behaviors. The teacher might say, "John runs around the room during group time and often whines and cries loudly enough to disturb other children" and then propose a series of actions. Finally, it is obviously necessary to discuss the results of assessments in the IEP meeting. It is rarely necessary, however, to place emphasis on scores such as the child's I.Q. Rather, professionals should explain the implications of the test information regarding programming for the child. If a parent wants to know actual scores, it is critical that members of the IEP explain what the scores do and do not mean. For example, if a parent insists on knowing the child's I.Q. or developmental quotient, it should be explained that scores obtained during the first five years of a child's life are not necessarily predictive of the child's later functioning.

Helping parents prepare for the meeting.

When professionals come to the IEP meeting, they generally come prepared to contribute information about the child. Parents, too, should be given this opportunity. Bricker (1986) suggests that parents be given a checklist before the meeting to help them consider programming that would assist in the child's life at home and in the community. They can use the checklist as a guide for collecting the information necessary to contribute at the meeting. Her book, Early Education of At-Risk and Handicapped Infants, Toddlers, and Preschool Children, includes a sample checklist.

When parents are notified that the IEP meeting will occur, they should be encouraged to write down their questions and comments and bring them to the meeting. The purpose of the IEP meeting and its intended outcomes should be explained when parents are notified.

Parental roles in meeting goals and objectives.

It is obviously important that there be coordination between the types of services that are delivered in the preschool and the child's activities at home. The most desirable coordination occurs when the services delivered in the preschool are relevant to the development of skills the child will apply in the home and community. While it may be easy to teach the child to identify colors in the preschool, that skill may not be nearly as important to the three-or four-year-old as his or her ability to play with toys or to respond when other children initiate to him or her.

Parents should be included in activities to help their child reach goals. Their involvement need not be that of home teacher of cognitive concepts in one-to-one instructional sessions; rather it may be as a teacher of adaptive skills during routine family activities (Rule, 1984). The parent may encourage the child to say "kitty" when the child babbles at the family cat. The parent may place the child's thumbs under the waistband of his underpants and assist him in pulling them up when he is getting dressed in the morning. Objectives to be addressed by the parents should concern functional skills that may be regularly addressed during naturally occurring opportunities at home. It is at the IEP meeting that the parents' roles as interveners will be defined. However, assistance to the parents in fulfilling these roles cannot end at the IEP meeting. Staff must include on the IEP the kind of assistance that they will provide to the parents and child in conducting these activities.

The IEP meeting may be baffling to parents. They may need time to consider proposed goals and objectives and their involvement. Staff should give them time to think, and if necessary, reconvene the meeting to make final decisions (Babcock, 1982). It is all too easy for professionals to overwhelm parents with terminology, instructions, and talk rather than creating opportunities for them to contribute to IEP meetings. Such behavior, however, is a detriment to the programming that the child will receive and may ultimately teach parents to become adversaries of the school rather than partners and advocates.

Service plans and safeguards for infants and toddlers with handicaps.

What is an IFSP? An IFSP is Individualized Family Service Plan. This is a plan, like the IEP, which governs services to an infant or toddler (0-2 years) because he or she has, or is at risk for developing, a handicapping condition. Like the IEP, the IFSP must be based on a "multidisciplinary assessment" (PL 99-457, sec. 1477) of the needs of the child and services which may meet such needs. It includes a written plan for provisions of services appropriate for the needs of the child. However, it may also address the family's needs as they relate to enhancing the child's development. Unlike the IEP, the IFSP may be developed after services have begun if parents consent to beginning services prior to the development of the plan. However, it must be developed "within a reasonable" time after the assessment necessary to determine the child and family needs. Like the IEP, it has to be reevaluated each year, but the family must be given a review of the plan at least every six months and more often, if that is appropriate to the needs of the child and the family.

What is in IFSP? The IFSP must address the child's current functioning in a variety of developmental areas: "physical development, cognitive development, language and speech development, psycho-social development, and self-help skills, based on acceptable objective criteria" (Public Law 99-457, section 1477 (d)). It must contain a statement of the family's strength and needs pertaining to their enhancing the child's development. It must contain a statement of the outcomes that may be expected for the child and family and "criteria, procedures, and timeliness used to determine the degree to which progress toward achieving the outcomes is being made and whether modification or revisions of the outcomes and services are necessary." It must include a statement of the specific services that are necessary to meet the needs of the child and family. The statement must tell how often services are provided, how intense they are, and how they will be delivered. The plan must tell when services will begin and how long they are expected to continue.

Unlike the IEP, the IFSP must also state the name of the person who will be case manager for the child. This person should represent a profession that is relevant to the child and family's needs. He or she will be responsible to see that the plan is implemented and to coordinate with other agencies and persons. The plan must also state the steps that will be included to assist the child in the transition to services at age three in the school system (provided that the child is in need of special education when he or she reaches the age of three). There is a difference in the kinds of services that may be provided to an infant or toddler who has handicaps (or is at risk) and those that may be provided to a child who is already three. It is possible to provide only "related services" to the infant or toddler; that is, they might receive only physical therapy. However, a child at age three can receive only those related services which are necessary to benefit from special education. Theoretically, there could be some children who receive services as infants and toddlers who would no longer be eligible for services at age three.

What happens if the agency does not comply with the IFSP procedures?

There are some differences in the procedural safeguards for infants and toddlers and for children who are aged three or older. Part H, the section of Public Law 99-457 which addresses services to handicapped children birth through age two, states that there must be procedural safeguards regarding services delivered to children and families. Those safeguards must be written and implemented by the state agency that is responsible for service delivery to infants and toddlers. This may not be the State Department of Education. The safeguards must make information accessible, include the right of appeal in the event of disagreement between the family and the agency, and assure that differences will be resolved in a timely fashion. There must be protection of parents' and children's rights of privacy--procedures to insure that information is confidential.

What does the IEP or IFSP contribute to early intervention?

If properly developed and monitored, the IEP or IFSP may be the single most important factor in early intervention for the child. The IEP or IFSP goals state the purpose of intervention. The plan documents the roles of professionals and family on behalf of the young child with handicaps. It specifically states what they will do, in what period of time, to enhance the child's development. The plan describes the organization of activities and resources to assist the child in meeting intervention goals.

To be effective, the goals on the IEP must be functional for the child. Such goals are likely to be identified only by a team of active participants which include professionals and family. The objectives must be measurable so that it is clear whether they are achieved. The plan must be reviewed frequently so that it can be modified when the child's progress, or lack of progress, indicates the need for a change. Such a plan reflects the commitment of a parental-school partnership to intervene in the best interests of the child.

REFERENCES

Babcock, L. (1982). Your child's education. In A handicapped child in the family: Readings for parents. Machias, ME: Washington County Children's Program Outreach.

Bricker, D. (1986). Early education of at-risk and handicapped infants, toddlers, and preschool children. Glenview, IL: Scott Foresman and Company.

Bricker, D. and Gentry, D. (1985). Evaluation and programming system for infants and young children. Eugene, OR: University of Oregon.

Brigance, A. H. (1978). Brigance inventory of early development. North Billerica, MA: Curriculum Associates, Inc.

Casto, G., Ed. (1979). An early intervention program for the handicapped child: Training manual. New York: Walker Publishing.

Education of the Handicapped Act of 1984. 20 U.S.C. Sec. 1400-1485 (1986).

Powell, T. (1986). It starts with just one family. Connecticut's university affiliated program brief. 1 (2), p. 1.

Rule, S. (1984, May). Concurrent home-school training of social skills: Can and should parents be involved? Paper presented to Association for Behavior Analysis Conference, Nashville, TN.

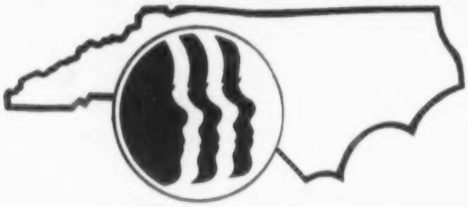
Striefel, S. and Cadez, M. (1983). Program planning and assessment guide for developmentally disabled and preschool children. Springfield, IL: Charles C. Thomas, Inc.

Weinstein, G. R. and Pelz, D. (1986). Administrator's desk reference in special education. Rockville, MD: Aspen Publishing Company.

White, O., Edgar, E., Harding, N., Affleck, J., Hayden, A., and Bindersky, M. (1980). UPAS: Uniform performance and assessment system. Columbus, OH: Charles E. Merrill.

Speech-Language Development Within the Classroom

Mildred Laney Blackburn
Lincoln County Schools
Lincolnton, North Carolina



INTRODUCTION

Someone once wisely said, "You can tell more about what you don't know than you can come back from where you ain't been!" This simple bit of homespun philosophy aptly describes my presentation today on "Speech-Language Development Within the Classroom," for it is going to be one of practicality - a culmination of ideas that worked for me through my years in the classroom with hearing impaired and speech-language delayed children. These ideas have been pulled from many sources - from a mixture of structured and unstructured program formats, from proven and disproved approaches, from searched and researched academic studies, and finally standardized and disseminated through the preschoolers in my "Hope-it-Works University."

LANGUAGE LEARNING

The word "language" has been given many definitions. For the high school English teacher it may be reading, spelling, and grammar; for the Foreign Language teacher, it could mean French, German, or Latin - a set of phonetic forms unique to one specific nation; for a preschool teacher or therapist, it may mean learning vocabulary words. Whatever our vantage point may be, we would all agree that language is a complicated, sophisticated system of abstract symbols used for the communication of ideas. The complication of rules which constantly change (spellings, grammar, subject-verb agreement and so on) and its abstractive symbolism which prevents hands-on or experimental learning for young children can make teaching language a tedious and awesome challenge. To further complicate its learning, language can be verbal, nonverbal, signed, gestured, spoken, written, sung, or even communicated with only an eye movement.

Ironically, for the average young child language learning seems to be a very natural and enjoyable process. Receptive language begins with the integration of sound in the following sequence:

- Recognition or awareness of sound
- Identification
- Localization or direction of sound
- Discrimination of sounds
- Sequentialization
- Memory
- Analysis
- Sustained auditory memory

This process occurs over the period from birth to ages three or four when the recall of nursery rhymes and simple songs signals that the final step of sustained auditory memory has been, at least minimally, achieved.

Expressive language development is occurring simultaneously with receptive language. Through the developmental steps of initial vocalizing, babbling, holophrastic naming, echolalia, and telegraphic speech to free expression of thought, the normal child moves effortlessly. The rapidity with which this occurs is shown in the following chart of normal language development.

AVERAGE AGE	EXPECTED DEVELOPMENT
3 mos.	Vocalizes - (Babbles or coos when talked to, or in play gives vocal expression to feelings of pleasure).
6 mos.	Vocalizes moods of pleasure up to 30 minutes - (grins, giggles, laughs aloud). Vowel sounds interspersed with consonants (in attempts of speech).
9 mos.	Imitates, coughs, kisses, clicks. Uses a two-syllable babble indiscriminately (da-da, ma-ma, wa-wa).
1 yr.	Says true first words (bye-bye, mama, dada). May use one word to express a sentence (Go, No). Imitates syllables and words after someone (echolalic).
1 1/2 yrs.	Uses 6-20 recognizable words and understands more. Asks questions: what? where? why?
2 1/2 yrs.	Says a few nursery rhymes. Names most common objects.
3 yrs.	Asks questions - answers simple questions. Uses 200 or more recognizable words - knows 500 to 1,000 words. Uses pronouns, negatives, and conjunctions.

Who then are the language impaired? Recent legislation mandating free, public service to handicapped preschoolers (P. L. 99-457) provides no clear lines of delineation between normality and abnormality. One definition suggests merely a discrepancy between the expected rate of development and the actual rate of development. Others have suggested a twenty-five percent delay between chronological age and developmental function. Whatever the final definition of language impaired may be in North Carolina, no one can deny that a significant delay in preschool language learning will result in severely depressed achievement in reading, writing, speaking, and academic growth at all levels.

Some of the common causes of delayed speech and language development are:

- I. Physical Aspects
    - A. Mental retardation
    - B. Hearing impairment
    - C. Central-neural damage
    - D. Emotional disturbance
    - E. Physical deformity of the speech-producing organs
- II. Environmental Aspects
    - A. Lack of good language models
    - B. Lack of stimulating experiences (language impoverished environment)
    - C. Inappropriate parenting
        - 1. Over-pampered: child has no need to express himself
        - 2. Ignored or rejected child: considers himself unable or unworthy of self-expression

Remediation of a language delay takes many forms. There are the structuralists who advocate a peculiar structure for teaching language systems. Then there are the naturalists who would use no supportive system, relying only on natural growth and development to correct any deficits. However, the system which has been most successful for me is one which might be called the ecological approach. This approach may be defined as a series of principles and procedures which are designed to develop effective communication through the relationships to, interactions with, and adjustments to one's environment. This approach necessitates an assessment of the child's developmental level and of his environmental opportunities for application in order to appropriately begin a program of remediation. It is an individualized approach that starts where the child is developmentally and moves from there. The emphasis is on the need to reorient language training toward an ecologically sound system focusing on the inclusion of family members as teachers and the use of everyday activities (both at home and in the classroom) for encouraging functional communication. To illustrate: "Da-da," a form of babbling which has little or no communicative value in the classroom, would be in the home, with a responsive father nearby, a very effective mode of communication.

Several principles underlie and support this approach. The first principle is that the language intervention procedures should closely approximate the naturally occurring processes of language acquisition. A child learns a new skill only to the degree of competency with which he mastered the previously learned skill. The teacher begins with the known and moves to the unknown, thus requiring language learning for the young child. Teaching that does not parallel methods of natural learning only confuses and frustrates both teacher and child.

The second principle of the ecological approach is that natural language models, especially parents and other family members, participate actively in the language acquisition of their child. Parents are the child's first and most natural teachers. They are the most concerned, therefore, the most motivated teachers. They are also the teachers of greatest continuity and duration.

Parental models are important because they give the child (1) sounds of the language, (2) feedback on correctness of linguistic forms, and (3) regular stimulation for learning vocabulary and language concepts in meaningful environments. Parents teach a child most of his/her vocabulary and will have done this before he/she ever enters the formal educational arena.

Acquisition of speech and language is dependent on the environmental stimulation which parents provide. Children need (1) to hear lots of language, (2) to have communicative interaction so they can practice interpreting and sending messages, (3) to be reinforced for their attempts at using language, and (4) to have numerous and varied experiences to stimulate language and concept learning.

Parents are the classroom teacher's greatest ally for teaching language in natural, contextual, and meaningful situations. Language and speech targets should be conveyed to parents on a daily basis. If this cooperative effort is established and maintained, parents and major caregivers assume the role of primary language teachers of the young child, and the classroom teacher or therapist becomes the planner in an effective, coordinated program. Fragmentation of the child is avoided.

Parents want to be actively involved in their child's education, but need information. Once provided with information, they become confident teachers.

Principle three of the ecological approach purports that language is a sophisticated means of communication that evolves from lower forms of communication. This idea was presented earlier when addressing the developmental stages of both receptive and expressive language. However, it deserves to have redress again for application with the severely handicapped.

Language development begins at birth with the ability of children to convey messages nonverbally. For some severely handicapped children, this nonverbal communication phase may last indefinitely. Basic rules of communicating still need to be learned. For example, children must first learn that communication is occurring, or being attempted. They can learn that speakers and listeners take turns, that listeners may or may not respond, and that either speaker or listener may introduce a new subject.

Students whose verbalizing skills are limited can be taught in modified systems appropriate to their learning styles. Primary steps are: moving from association of name with concrete objects to object symbols, to pictorial representation, and finally to abstract symbols/words. Single words are then expanded to phrases, sentences, and stories, as indicated.

A similar approach in speech development is necessary. Meaningless babble or vocalization can be given meaning when consistent association with objects or actions is made by an astute teacher. Babble then becomes words, and communication has begun.

The fourth principle is that the learner must be actively involved in the language acquisition process. Children, by nature, learn through the utilization of all senses. Young children are stimulated by sound, smell, touch, or the sight of a mother's face to eat. These same stimuli may under other circumstances create the desire for sleep. Children explore through taste, sound, smell, touch, and vision until they enter the sanctuaries called "schools." Suddenly this freedom to explore freely and kinesthetically is stifled, and forced learning only by audition and respond-on-command begins. While verbal imitation and verbal responses for children may occasionally be appropriately used, the natural or ecological approach to learning places little emphasis on structured language learning - especially elicited responses only. Spontaneous communication through frequent social interchange in enjoyable situations creates an ideal setting for meaningful language learning. Planned speech and language activities, when necessary, must be interesting to children. They must also be fun.

Active involvement occurs in:

- Learning centers for role playing, classifying, categorizing, seriation, puzzle solving, and block play
- Music, where teaching of language is unlimited (counting, learning the ABC's, directionality, seasons, holidays, history, geography, and on and on)
- Choral Speaking
- Listening centers with recorded books, tapes, and records
- Drama
- Puppetry
- Show and Tell or similar sharing activities
- Flannel board stories
- Snack time

Active involvement also means learning visual alertness to detail. This skill is particularly important for carry over into reading. Objects should be labeled in classes of young children. All songs and poems should be displayed on charts and "read" again and again. Games of matching pictorial language targets to their symbolic representation, i.e., words, can be fun for young children. Display these pictures and matching words in pocket charts for visual absorption all day. Phonemes should be identified systematically as targets for learning and words with these phonemes in the initial position should be *elicited from the children*, thus incorporating their experience and environments. These words can then be written on charts and displayed for casual learning.

Unit teaching lends itself well to all subject area teaching, especially speech and language. Unit teaching also meets the criteria for successful learning permanence:

- It must be relevant (seasons, holidays, community helpers, and so on) to the child's immediate needs and feelings.
- It must be reinforced through the total environment of home, school, and community.
- It must be interesting and capitalize on the child's innate curiosity.
- It must actively involve the child (drama, art, music, dance, and so on).
- It must reward the learner when learning occurs. (Expanded language and speech fluency produces self-confidence and a sense of power for the child.)

Speech Learning

Most of the principles already addressed for successfully teaching language also apply to the teaching of speech in the classroom. Certainly one should not expect a child to practice "Nana, the Noot, from the North..." when none of it has meaning or relevancy for the learner. However, utilizing the ecological principles of pulling speech targets from the child's experience and environment, and incorporating his classroom teacher, therapist, and family member into an active coalition of teachers, makes for quick mastery of the "n" phoneme.

Speech production also is generally predictable in development, as is language. Care should be taken to avoid labeling children as speech impaired or attempting to correct articulation errors when, developmentally, the child is not ready to produce the phoneme. A checklist for assessing speech sound production, developed by Mildred Templin and published in *Certain Language Skills in Children, Their Development and Interrelationships* follows:

CHECKLIST FOR ASSESSING SPEECH SOUND PRODUCTION*

Sound	Key Words	Average Age of Mastery
m	moon, hammer, gum	3
n	nut, pony, spoon	3
ng	finger, wing	3
p	pie, apple, cup	3
f	face, coffee, leaf	3
h	hand, dollhouse	3
w	wagon, sandwich	3
y	yellow, barnyard	3 1/2
k	key, cookie, rake	4
b	bike, baby, tub	4
d	dog, radio, red	4
g	girl, wagon, pig	4
r	rabbit, carrot, car	4
s	sun, glasses, dress	4 1/2
sh	shoe, dishes, fish	4 1/2
ch	chair, matches, watch	4 1/2
t	top, kitten, foot	6
th	thumb, bathtub, teeth	6
v	vase, oven, stove	6
l	lion, pillow, doll	6
th (voiced)	this, father	7
z	zoo, scissors, nose, television	7
j	jump, engine, cage	7

* Norms for the checklist have been derived from the average age at which 75 percent of the children said the sound correctly in the beginning, middle and end of a word.

When speech is found to be deviant, three basic areas need to be evaluated. They are articulation, fluency, and voice disorders.

I. ARTICULATION

When an articulation error occurs, speech production is imprecise in one of several ways. One type of error is "substitution," when an appropriate sound is replaced by an inappropriate one (wed for red). Another type of articulation error is referred to as "distortion." This occurs when a sound has not been produced in a standard way but the production is perceived as the appropriate sound. The third type of articulation error is called "omission," when sounds within words are omitted entirely (p-ay for play). (Shames, Wiig. 1982.)

In order for a child to be considered..."for placement in an articulation therapy program, she must demonstrate one to three consistent sound substitutions and/or distortions of sounds which should have been developed within one year of his/her chronological/cognitive level." Procedures Governing Programs and Services for Children With Special Needs.

The most successful speech correction program for young children is one where the classroom teacher in conjunction with the parent(s) and/or major caregivers become the primary speech teachers. In a classroom setting, speech targets may be taught in abbreviated periods of two-to-three minutes duration numerous times each day. Instantaneous and spontaneous opportunities for correction of targets occur all through the day. Targets may be intricately but inconspicuously woven into language programs, music, poetry, and play activities for each child on a daily basis.

If the preschool classroom teacher is not also a trained speech/language therapist (and this would rarely be the case), then the speech/language therapist becomes the speech coordinator. She evaluates, determines the appropriate speech target(s) and provides consultation to the classroom teacher for implementation techniques. The classroom teacher incorporates the target(s) into the teaching program - teaching, modeling, reinforcing daily. She also provides the parent(s) or major caregivers with information concerning the current speech target and with ideas for providing transfer into functional, ecological, meaningful communication. Practice makes permanent, and the desired learning has occurred through coordination of effort.

SUMMARY

Language is the foundation of all learning in today's educational programs. Reading, spelling, writing, and oral communication are all phrasitic skills of previously learned language. Yet these same skills are the roadways which map achievement and growth in the educational arena. Without a well-developed language base, there is little academic progress guaranteed in today's school structure.

Similarly, the ability to speak articulately and fluently is the avenue used to sell oneself in today's job market. Ironically, speech and language proficiency is the critical skill which must be learned before a child even knows the meaning of the word "success." We as teachers who are chosen to guide, direct, and program these critical years for the unsuspecting innocent, can ill afford to be less than the best.

Assuring Learning Through Play

Jeanne B. Henry
Private Consultant
Colonial Heights, Virginia

Early Education of the Handicapped is predicated upon the same theoretical base as Early Childhood Education in general. Children are children, and what is good educational practice for normal children is good educational practice for children with handicaps. Children are children and they all have the same basic needs. Obviously, some children with cerebral palsy may need a wheelchair when normal children do not. Handicapped children may have more deficit specific needs, but they have the same physical needs, social needs, emotional needs, and intellectual needs that normal children do. What we as teachers have to do is to make whatever accommodation is necessary to allow handicapped children to benefit from the kinds of experiences we know are best suited to meeting the needs of all children.

Why Play? Why do knowledgeable Early Childhood Specialists insist that play is so important in the face of opposition from parents, school administrators, other teachers and especially from self-appointed experts in the community. Why Play?

Developmental Neuropsychologists tell us a great deal about the biology of children's brains. In a nutshell: the neuron is the basic unit of the nervous system, the brain. Infants are born with about fifty billion neurons, almost all they will ever have. These billions of neurons work by receiving messages from and sending messages to recipient nerve cells. Sending and receiving cells are linked together in circuits by protruding growths called dendrites. The actual linking sites, the specific points on their surfaces where nerve cells communicate, are known as synapses. The infant is born with about all the neurons he will ever have. What he is not born with is the extensive development of dendrites and synapses without which the work of the brain (receiving messages from and sending messages to selected nerve cells) cannot proceed.

What makes this branching neural network form? Research indicates that SENSORY EXPERIENCE DRIVES NEURAL DEVELOPMENT. From the moment of birth (and in some instances even before) children see, hear, feel, smell and taste. They feel parts of their bodies move in space against the pull of gravity. These experiences can modify the nervous system directly. For instance, when researchers deprive target areas in the brain of environmental stimuli by sealing a new-born kitten's eyes closed, neurons in the occipital lobe (the center of vision) show fewer dendrite branchings, fewer spines, fewer synapses. They show less development in every particular way than neurons receiving normal stimulation.

SENSORY EXPERIENCE DRIVES NEURAL DEVELOPMENT.

Another experiment with identical twin kittens points out one more very important fact to keep in mind in considering the developing neural system. A revolving bar apparatus was rigged up in a patterned box designed to stimulate the kittens' developing visual systems. Each day the animals were placed in the box, but one had to work for his visual excitement; he was harnessed to pull the bar around while his brother rode in a small basket. Although the visual input was identical for both animals, the one who did the work developed more neural connections. So while sensory stimulation drives neural development, active interest and effort are also very important.[1]

Now, what does all this tell us about play? If sensory experience drives neural development, then play is essential if the brain and nervous system are to be developed to the maximum. The basic blueprint for neural development is undoubtedly laid down by the genes, but sensory experiences may determine the complexity of neural connections and network.

What is play, anyway? There are many definitions, some of them written in almost unintelligible "educationese." This is one of the better ones: "Play is self-motivated activities whose rewards lie in the gratifications that they bring directly to the participants." What is that saying? Play is an activity (that is, active) that children choose to do because it is enjoyable--or fun. When a child plays, it is fun. He wants to do it. He chooses to do it. Here let me be sure everyone knows what is meant by FREE PLAY.

Free play does not mean an unstructured time when the child is uncontrolled, running wildly about screaming and yelling. Free play is a time when the child is free to choose from the environment that the teacher has very carefully planned and set up, knowing the goals and specific objectives she has for each student. The teacher sets the stage for learning to take place, but the child chooses what he wants to do, with whom he wants to do it, and generally, how long he wants to do it. The teacher is always available to take advantage of the natural opportunities which arise to foster social skills. Through many repeated play experiences, the child clarifies and masters fundamental physical, social, and intellectual skills and concepts. Play is the child's work. This has been said so often it sounds trite. But it is true. Play is how the child learns about himself and his world. The more the play experience makes use of his senses, the more valuable it is.

Much of the value of play is in the process of doing it. The same can be said of art. It is not the finished product; it is what happens to the child in the process of doing it. The seeing, the hearing, the manipulating, the smelling and tasting, the moving and balancing and turning and climbing--all these things are driving neural development at the same time the child is learning how to learn. He is learning specific ideas and skills in an incidental way and integrating them into wholes. Learning is occurring in the areas of language and vocabulary development, numbers and measurement, thinking skills, symbolic thought and perceptual-motor skills. Play and playthings and learning are so intertwined they cannot be separated.

For the child, play is an end in itself. Pleasure. Fun. For the teacher, play is the motivator. Play is the method. Play is the tool for accessment. Play is the means of promoting neural development which provides the base for learning. Play experiences need to be associated with the child's life and interests, so intervention and facilitation are sometimes needed

---

[1] Bloom, Floyd E., Lazerson, Arlyne and Hofstadter, *Brain, Mind, and Behavior*. New York, N.Y.: W.H. Freeman & Co., 1985.

(especially for children with handicaps) to help integrate the separate and varied experiences into a meaningful whole.

So, Why Play?

1. Because neurological development depends on it. Because it is essential if the nervous system and brain are to reach maximum developmental potential.

2. Because it is a natural activity of childhood and provides natural ways for children to grow and learn physically, socially, emotionally, intellectually and linguistically.

3. Because good play experiences provide intrinsic (built in) motivation and are relevant to children's interests, their needs, their abilities and their understanding.

4. Because concepts and skills learned through play transfer to other situations more readily than artificially contrived learning.

5. Because it is fun and the right of every child. The United Nations Declarations of the Rights of the Child include the right to play with other rights essential to the child's well being, such as the right to adequate nutrition, the right to special protection, the right to adequate health care, housing and education.

I might add here that it is especially important for children with handicaps to be taught to play and helped to learn to play independently if for no other reason than that no teacher, parent, or caregiver can provide 24-hour-a-day entertainment.

In order to be able to insure appropriate play experiences for children, teachers need to be well versed in child growth and development and in how the various "ages and stages" correlate with neurological development. (Evidence strongly suggests that Piaget's successive stages of cognitive growth occur as the cortex matures and becomes progressively organized.) It is possible to force skills by intensive instruction, but this may cause the child to use immature, inappropriate neural networks and distort the natural growth process. Many abilities depend on nature's maturation of particular neuron systems by coating the message-sending axons with myelin, an insulating fatty substance which helps speed messages from cell to cell. Before mylination, messages can travel along axons, but they do so erratically and inefficiently. Myelin formation appears to occur in cycles that precede the child's mastery of increasingly complex learning.[2]

Some research suggests that the best way to stimulate myelin growth is to help the child understand relationships. For example with the opportunity to play with sand and water over a period of time, a child comes to understand that dry sand will not mold into the shape of a container, but by adding water and making wet sand, all kinds of "cakes" will hold their shape. But remember the working kitten! Giving verbal information will not result in the same kind of learning that active sensory play will achieve.

---

[2] Healy, Jane M., Ph.D., Your Child's Growing Mind. New York, N.Y.: Doubleday and Co., 1987.

It is extremely important for all teachers, both of normal children and of handicapped children, to know as much as possible about child growth and development. Gesell emphasizes that all children are individuals and develop at differing rates of speed, but growth occurs in an orderly fashion. Some children walk at 9 months, some at 12 months and some at 15 months, but always a child sits before he stands, stands before he walks, walks before he runs. It is the sequence of development that is important--to teachers of handicapped children as well as to teachers of normal children. The successful teacher uses this knowledge to structure the play environment so that her children can be both challenged and successful.

Two examples of how multiple objectives can be pursued through a single integrated play activity are THE SUGAR PLUM TREE and THE GINGERBREAD MAN. The directions for these activities are attached.

THE SUGAR PLUM TREE

A Christmas Learning Experience

This Christmas-time activity provides a joyous learning experience for children at every level of development. I have used it with a small group of 3-year-olds, with combination 4-and 5-year-old classes and with both private and public school kindergarteners. There is built in motivation for learning, and it was planned to incorporate experience in every curriculum area. I asked teachers of handicapped preschoolers about the activity, and they felt that it could be adapted for children with almost any handicap.

There are a few preparations which need to be made ahead of time. Although as a general rule I strongly disapprove of giving children any pattern or teacher prepared materials, I do cut out and tape a pyramid shaped "tree" form for each child in the class. It has to be made from cardboard, as the finger muscles of most preschoolers are not strong enough to do the cutting without discomfort.

On "Sugar Plum Tree Day" assemble a dozen eggs, a large bowl, two small bowls, measuring cups, food coloring and four boxes of confectioners sugar. You also need a rotary egg beater, a hand mixer and a large electric mixer. (If you have a child with a physical handicap who needs practice with a specific movement, you might provide a switchboard to enable him to turn on the mixer. It is important for every child to be actively involved in the project.) It will facilitate clean up if you cover all the tables and counters to be used with clean white paper.

On the most "out of the way" table which you have covered scatter as many different kinds of Christmas candies, miniature marshmallows, miniature candy canes, gum drops, etc., as you can find. Mix them up. Wait until a time when the group needs to move about, or let any restless children sort the candies. Give only one instruction: "Put the ones that are alike together." Some children will sort according to color, some by size, some by variety. The child's stage of development will determine the criteria he chooses so any way he does it is acceptable. This is also a good time for counting and combining and separating sets.

Now you are ready to begin! Gather your children around you on the floor and recite for them Eugene Field's classic poem, "The Sugar Plum Tree." Be sure to add sound effects of barking dog and hissing cat for this delights the children. At a later time, they will enjoy dramatizing the poem. It will add to their storehouse of literary experiences. They will also love illustrating the poem at the painting easel the next day.

After the poem, begin to talk about how we make our trees and what we use. As with any experience you provide for your children, ample time must be allowed for talking, talking, talking, and experimenting with ideas and words and sharing information. The experienced teacher will take her cue from the children to know when to go further with one idea and when to introduce another. Although some basic things never change, conversation time is always different from year to year.

First pick up an egg-- What is it? What shape is it? What color? How does it feel? (Be sure to pass it around, feeling, smelling, tasting and observing are important in this play experience.) Where does it come from? Before Safeway? How many other kinds of eggs can you think of? (turtle, bird, duck, snake, dinosaur) How many eggs are in this carton? Let's count. Another way of saying 12 eggs is a ------. Can we have a dozen of anything else?

NOW--separate an egg, putting the yolk in a small bowl and the white in a measuring cup. (If this were just any cooking experience I would allow one of the children to break the egg, but if even a minute particle of yolk gets in the white the frosting will not harden.) What is the outside of the egg called? Do you know anything else that has a shell? (turtles, nuts, cicadas, etc.) What is the yellow part called? What shape is it? What is the other part called? I wonder why. Is it white? (Let all the children feel the white.) What does it feel like? Can you think of anything else that feels like this?

After feeling and talking just long enough, separate two more eggs. Count them as you break them. Two this time, one last time, how many? If it seems propitious and there is interest, call attention to the fact that you have used three of the twelve eggs, how many are left? Now measure the whites. (Three usually yields about 1/2 cup.) After measuring, place whites in small deep bowl and let children take turns with the rotary beaters. What is happening? Observe changes. Switch to the hand mixer and let more children have turns turning it on and holding it. Talk about what the mixer sounds like. Can they think of other machines that have similar sounds?

After the whites are stiff and hold a peak, talk about what has happened. What happened to the color? Now they really are white! All children feel again. Does it feel the same? Is there more or less than when we started? Let someone come and measure. (There should be approximately three times as much as when you started.) How did we get more? At this age children will be convinced you put something else in. Ask them what. They were watching. A hint will probably be needed so you might start the mixer and hold it carefully over a child's hand. What do you feel? The idea that you added AIR to the egg whites is bound to come up.

Now separate the remaining eggs (counting as you go) and begin beating with a large mixer. Begin letting each child add half a cup of sugar, one at a time. Add as much sugar as the egg whites will take. The frosting must be VERY stiff. It will lose its gloss when it is ready. Let children add squirts of green food coloring until the frosting is a good "tree" color. (I can see no objection to a tree of another color if there are helping hands enough to accomplish it.)

If you have a very large class, it would be wise to mix another bowl of the frosting before the children arrive. You will need to cover it with a damp cloth. Then there will be enough frosting for all the children to begin to decorate their trees without any waiting.

As hands are washed and clean paint shirts are donned to protect clothing, the usual discussion about cleanliness around food is reviewed. It is wise to allow each child to choose one piece of the candy to taste and to tell them that we'll have more later after everyone finishes decorating his tree.

Each child is given a tree form, and shown how to hold it by putting his thumb on the outside. Talk about its shape. Most of the children will not remember the name "pyramid," but the sensory experience will be in the recesses of his mind to give meaning to the term in some far distant geometry class. Furnish each child a small dish of frosting and a table knife and tell him to put a THICK layer of frosting on his tree. It will probably be necessary to provide some concrete examples of "thick" and "thin": pieces of wood or a piece of heavy wool fabric and a piece of organdy or silk. We assume that children understand what we mean by "thick," but many have never experienced the concept.

The frosting must be put on thick or the candy, the "Sugar Plums" decorations will not stick. Let each child use his own creative ideas in decorating his tree with whatever "Sugar Plums" appeal to him. Some children will want only two or three candies on each side of their tree, some will load the trees with a wide variety. Above all, do refrain from "fixing up" any child's tree or saying, "Don't you want one over here? Obviously he doesn't, or he would have put one there! Your "touching up" of a child's work is a subtle criticism of his ability and taste. Allow him to be proud of his own work.

As each child finishes his own tree to his own satisfaction, he uses a little frosting to stick it down on a sturdy paper plate which you have already labeled with his name on the bottom.

The trees will harden overnight and if surrounded at the base by a little greenery will make a spectacular centerpiece. It does wonders for a child's self image to be able to make a contribution to the lovely Christmas decorations for his home. In order to insure its safe arrival home, I cover the trees with wide Saran Wrap and tie it with a red bow at the top. I also mail a letter home the day before we make the trees, explaining to parents how such a joyous play experience is used to teach math, science, and language. This usually assures a very positive reaction to the child's holiday gift for his home.

It is nice to have THE DANCE OF THE SUGAR PLUM FAIRY on the record player, so the children can dance or rest with it after they help clean up the mess. Let's face it! It does make a mess--but such a glorious, happy, exhilarating, worthwhile mess: The Sugar Plum Tree, a learning experience they will always remember!

```
*****************************************************************
*    1 dozen eggs        4 boxes confectioners sugar           *
*    5 doz. assorted candies will make 14 trees                *
*****************************************************************
```

Copyright 1987 by Jeanne B. Henry
Reprinted by permission

THE GINGERBREAD MAN

This activity was designed to help small children feel safe and comfortable in the large elementary school they attended. It provided opportunity for them to meet school personnel in their own offices or rooms. It was necessary to contact and get the cooperation of staff members: dietician, school secretary, principal, librarian, guidance counselor, computer room aide, school nurse, custodian. All of these people thoroughly enjoyed participating and some (like the librarian who put cinnamon potpourri in her coffee pot) went out of their way to cooperate.

There are several versions of the story of the gingerbread man. I read at least two and we talk about how they are different and how things don't always have to be the same. We can make other endings, if we want to.

Then we prepare for our baking day. Assemble bowl, measuring cups and spoons, electric mixer and a large cookie sheet. As usual with cooking experiences we do a lot of talking, discussing, measuring, mixing, feeling, smelling and tasting. Of course before we even get started we wash hands and talk about cleanliness around food. I use a box mix or two depending on the size of the group and follow the directions for making gingerbread cookies.

Since we are making one large gingerbread man we need to work together. Each child is given a lump of dough. Two or three children place their dough in the place where the head is to be. Four or five make the tummy. Two make each arm and leg. All these lumps of dough need to be mashed together and smoothed out. Next someone puts on raisin buttons, M&M eyes and grin and he is ready to bake.

Then the whole class goes together to take the cookie sheet to the kitchen where we ask the dietician if she will please bake our gingerbread man. She tells us what time to come back to get him. When we return at the specified time, the dietician has a very sorrowful face as she tells us how sorry she is but the gingerbread man ran away when she took him out of the oven! She says that the last she saw of him, he was headed toward the office.

We decide to see if we can catch him. We go very quietly because we don't want him to hear us coming! The children ask the school secretary if she has seen their gingerbread man. After she looks all over the office, in the safe, in the supply room and in all her desk drawers, she looks under her typewriter cover and finds a note in her typewriter which says, "Run, run, as fast as you can, you can't catch me, I'm the gingerbread man!"

Then the principal comes out and talks to the children, telling them he'll be glad to help if he can, because that is why he is there, to help boys and girls.

From the office we go to the library and when we go in we can smell him! When the librarian takes us in to see where she stores all the tapes and movies, a note is discovered on the floor which says, "Run, run, as fast as you can, you can't catch me, I'm the gingerbread man!"

We go on with our search, to the guidance office, to the computer room (where someone sees another note WRITTEN ON THE COMPUTER SCREEN!). Then the custodian lets us look in his storeroom, but no gingerbread man. Finally, we decide to look on the playground and when we don't find him there we go back sad and dejected to our room. And SURPRISE! There is our gingerbread man still warm, smelling oh so good, right on one of the tables. So, we eat him for a snack because that is what gingerbread men are for--to eat.

Besides all the sensory stimulation of this activity, the math and science always inherent in a cooking experience, the story, the potential for "playing the story" later, the language used to ask all the new people in their lives questions, the "reading" of the notes, the excitement of the chase, the socialization which goes on between members of the class and the school personnel is a very rewarding experience.

The idea for this activity was in an issue of EARLY YEARS years ago. I have lost the original article, so I cannot give proper credit to the teacher who originated the idea. I wish I could.

Peer-Mediated Instruction for Young Children's Social Skill Deficits

Phillip S. Strain
Western Psychiatric Institute and Clinic
University of Pittsburgh School of Medicine
Pittsburgh, Pennsylvania

One of the great unmet challenges in American public education is the development and implementation of teaching strategies and curricula that promote children's skills in getting along with and respecting one another. The need for promoting these broadly defined social skills cannot be overemphasized. The sad lack of these skills in many children is not just a school problem; it is one of profound societal proportions. We see the direct consequences of these skill deficits in children and youth in the form of stereotyping and scapegoating, bigotry, drug abuse, violence, social isolation, and suicide. We see the even longer-term effects in an adult generation that has led the world to the brink of nuclear annihilation. When we consider handicapped children only, the need to program for these skills is even greater. Not only do the majority of these children fail to develop these skills naturally, but they are doubly handicapped by the bias, misinformation, and prejudice of their age-peers.

For some 10 years now, we have been involved in a series of projects leading toward the development and validation of both teaching procedures and curricula to address particular social skills deficits of young handicapped children. This work may be considered as addressing four basic questions: 1) What to teach; 2) When should teaching begin; 3) Who should teach; and, 4) What should the teaching procedures be? The remainder of this article will summarize findings related to each question.

What to Teach

The universe of social skills that may facilitate children being able to get along with each other during good times and bad is essentially endless. Practicality dictates the selection of a limited number of skills of particular importance and impact on others.

In order to pinpoint specific skills for instruction, we have conducted a series of intensive observations on preschool age children who peers nominated as socially skillful or likeable and not likeable. Similar studies were also conducted with handicapped preschoolers who normally developing children thought were more and less likeable. Across all our studies, we have found great consistency in the findings, and we are thus confident in the widespread applicability of the results. Whether children are identified as handicapped or not, likeable and skillful preschoolers are those who:

1) Seldom, if ever, act in a way to injure (psychologically or physically) their peers;

2) Negotiate disagreements over objects (my toys versus yours) and rights (my turn versus yours) in a way that provides a compromise for both parties ("You can play with it now if I can have it later.");

3) Help their peers accomplish simple tasks (getting onto and off some play apparatus);

4) Share materials and resources (cooperatively use paints); and,

5) Organize play activities that include others ("You be daddy, I'll play mommy.")

The skills listed above form a composite picture of the socially skillful preschooler. In lay terms, we might describe our "model" preschooler as kind, considerate, and generous. Given that we have identified particular skills that distinguish our most likeable preschoolers, the next question is when should we begin to directly teach these skills?

When Should Teaching Begin?

To answer this question, we have pursued answers to several sub-questions, including: 1) When do children first display deficits in the target skills; 2) Do early skill deficits predict later, more severe problems; and, 3) Is there reason to expect that beginning intervention early will be more successful than beginning intervention later?

In regard to the first question, our observational studies in preschools show that dramatic, predictable differences exist in children's (both handicapped and non-handicapped) social skills as early as two years of age; and, the magnitude of difference increases rapidly across the preschool years. This, of course, is a pattern of increasing difference in skill that is so well documented with school-age children who are academically behind their peers in kindergarten and first grade.

Not only do deficits in the skills associated with being kind, considerate, and generous emerge at an early age, but, if left unattended, we see that the long-range prognosis for these children is both poor and unacceptable to society. Early identified children with social skill deficits have been shown to be represented in large numbers of later school drop-outs, delinquents, academic underachievers and young adults who receive dishonorable military discharges and who report a higher than average amount of marital problems. In answer to the second sub-question, there can be no doubt that ignoring and not treating young children's poor social skills will not make them go away. While the "cost" of not intervening early may not be evident in the preschool years, the debt is simply compounded many times over and passed to the next generation.

Our final sub-question addresses the general efficacy of beginning intervention as early as possible. While our information is incomplete and imperfect, we can say that all the available evidence points toward the potency of an "earlier the better" approach to social skills training. Specifically, we know that children with severe handicapping conditions (e.g., autism) do not make significant progress in social and communicative skills when intervention begins at school-age or later. Also, long-range follow-ups on less handicapped children indicate that performance in elementary grades is greater for children beginning intervention prior to age three. While the specific experiment has yet to be conducted on all sub-groups of young handicapped children, we presently have no evidence that waiting to begin intervention is wise; and, there is mounting evidence that earlier is better for achieving child gains.

Who Should Teach These Social Skills?

Given that we have some indication of what social skills to teach, and that we should begin as early as possible (two to three years of age), our next question is who should be the primary service deliverers?

When we began our research on social skill instruction, we felt strongly that competent, highly-trained teachers would give us our best results. Unfortunately, our hunch was only partially correct. While our teachers performed exactly as we wished, the effects on children were limited. Within the narrow space and time confines of teaching settings, the children made nice improvements; however, they did not display the skills during all-important, noncontrived interactions with peers. Part of the problem, we suspected, had to do with the unavoidable artificially imposed when an adult (teacher in this case) tries to intervene on interactions between children.

Since the "problem" we had identified in young handicapped children lay in the interactions between peers, we reasoned that peers themselves held the potential for producing powerful changes in child behavior. Over the last eight years, we have trained successfully dozens of three, four, and five-year olds to improve the social skills of their classmates. The training of peers has been relatively simple, usually improving four twenty-minute role play sessions in which the teacher models desired behaviors and engages in behaviors that may be typical of the handicapped children.

When compared to adult trainers, our young intervention agents tend to produce child behavior changes that are more long-lasting and that occur outside of training settings. For the peer trainers, they tend to improve their social skills and standing in the peer group as a result of participation. No negative side effects have occurred for any children.

The uniform success of our peer trainers and the power for behavior change that lies in the preschool peer group is best reflected in a model preschool program that we have operated in Pittsburgh for the past four years. In this program, known as LEAP, normally developing preschoolers are integrated with similar age autistic children in two classrooms. The normally developing children, besides being afforded a highly-structured, individualized curriculum, play a major role in teaching their handicapped classmates. Our initial results and follow-ups show that both groups of children progress at a rate of growth that far exceeds what one would expect from the program-entry skills of the youngsters.

What Should the Teaching Procedures Be?

Our final question concerns the actual activities of the peer intervention agents and the planning of intervention sessions. In this section, a brief overview will be provided on the needed materials and activities for the peers' instructional strategies.

Like any good instruction, the peer-mediated social skill teaching begins with a careful plan for selecting materials and activities. Research by our group and others has identified the following materials as being associated with high levels of cooperative peer interaction; dress-up clothes, blocks, house and kitchen play items, dolls, balls, wagons, and puppets. Activities are the situational context in which the materials are used. We have found the following activities to be associated with particularly effective peer instruction: a) dramatic play episodes, particularly with grocery, picnic, doctor, and body care themes; and, b) constructive activities where children are gluing, doing puzzles, parquetry or pasting.

Within selected play situations, using cooperative use toys and materials, peers are trained to engage in a series of social initiations toward target children. Specifically, peers are taught to be persistent in their attempts to: 1) share items with target children and get target children to share in return; 2) help target children with any ongoing activity (such as fitting a puzzle piece, lifting a large block); and, 3) organize play with target children using "Let's" statements ("Let's play ball, roll it to me"). These specific social approach behaviors operate in two important ways. First, they provide target children with repeated, positive behavioral models. Second, when persistently directed toward target children, these social initiations come to elicit positive social behavior from these youngsters. Our peer trainers are given specific feedback about the importance of being persistent, since many children may, at first, not respond to their initiations.

Summary

Currently, there is a major disparity between the need for social skill instruction of young handicapped children and the availability of validated teaching procedures and curricula. While some have argued that academic instruction should have our primary attention and resources, the long-term consequences of untreated social skills deficits cannot be denied or tolerated. Our peer-mediated strategy is one approach that is both effective and deliverable at a reasonable cost to classroom resources.

ARE THE TEACHING EFFORTS SUCCESSFUL?

CRITERIA FOR JUDGEMENT

I) Observing Program Consumers

1. Does the handicapped child perform the desired social skills more frequently?

2. Does the handicapped child perform undesirable social skills less frequently?

3. Do these social skill improvements occur in nontraining situations?

4. Do these social skill improvements persist after termination of the teaching program?

5. Does the handicapped child demonstrate skill improvements that were never formally taught by the teaching program?

6. Do individuals in the handicapped child's social environment (e.g., peers, parents, teachers, etc.) interact more positively with this child?

7. Does the handicapped child's performance approximate that of peers who did not received social skills training?

WHO NEEDS SOCIAL SKILL TRAINING?

TEACHERS IDENTIFY CANDIDATES

Date__________ Child's Name______________________________ Rater____________

1. Given an occasion in which the child has play materials and another child does not, the child will:
    a. tell other children not to take his materials
    b. not spontaneously offer to share materials
    c. share materials on rare occasions (0 to 25% of occasions)
    d. share materials occasionally (25 to 50% of occasions)
    e. share materials frequently (50 to 100% of occasions)
2. When a peer offers to share a play material, the child will:
    a. say no or push the materials away
    b. ignore the share offer
    c. rarely take the material (0 to 25% of occasions)
    d. occasionally take the material (25 to 50% of occasions)
    e. frequently take the material (50 to 100% of occasions)
3. During a play activity, the child will:
    a. tell other children he/she does not want to play with them
    b. ignore other children
    c. rarely suggest a play idea or role for another child (0 - 25%)
    d. occasionally suggest a play idea or role for another child
    e. frequently suggest a play idea or role for another child
4. When another child suggests a play idea or role, the child will:
    a. say no or otherwise respond in a negative fashion
    b. ignore the other child's play suggestion
    c. rarely comply with the play suggestion or role (0 - 25%)
    d. occasionally comply with the play suggestion or role
    e. frequently comply with the play suggestion or role

WHAT SKILLS SHOULD BE TAUGHT?

OBSERVING NORMATIVE AGEMATES

Positive Social Initiations: Frequency of Occurrence and Likelihood of Positive, Negative or No Peer Response

Social Initiation	Mean Freq per 6-min.	Type or Peer Response		
		Positive	Negative	None
Rough and Tumble Play	.37	92%	1%	7%
Share	.88	79%	6%	15%
Play Organizer	.77	67%	6%	27%
Assistance	.24	63%	6%	31%
Question	1.18	51%	6%	43%
Imitation	.25	46%	0%	54%
Command	2.32	45%	9%	46%
Statement	6.40	33%	4%	63%

CLASSROOM PREREQUISITES TO USING PRESCHOOL CHILDREN AS INTERVENTION AGENTS

I. Establishing Independent Performance with Nonhandicapped Children Only

- A) Self-care skills (dressing, toileting, eating)
- B) Movement to activities without direction
- C) On-task behavior at 90% without teacher supervision
- D) Getting and replacing materials alone
- E) Waiting, with hand raised, for help
- F) Knowing schedule and rules

II. Establishing Helping Behaviors Among Nonhandicapped Children Only

- A) Asking for help from peer before teacher (including making eye contact, using others' names, repeating requests)
- B) Cross-developmental pairing (2-5 yrs.)
- C) Assigned to area as teacher for the day
- D) Units on friends, helping
- E) Having "visitor" kids come to class
- F) Teaching appropriate social play and toy use (structured free-play)
- G) Monitoring teacher behavior to see that instruction is child-based
- H) Newsletter to parents to mention examples of good helping, sharing opportunities in the home

PROCEDURES FOR TEACHING PEER AGENTS

1. Complex social interaction strategies are broken down into multiple sub-skills.

2. These skills are organized according to their requisite relationships.

3. Teaching sessions of 10 to 20 minutes duration are planned.

4. Each teaching session focuses on only one or a few skills. The most basic or prerequisite skills are taught first, followed by extensions of these prerequisites. New skills are not introduced until previous skills are mastered.

5. Specific training strategies include the following steps:

    a. Adult introduces and provides rationale for skill.

    b. Adult describes and demonstrates skill while child watches.

    c. Adult and child practice skill together.

    d. Adult gives ongoing instructions, correction and feedback.

    e. Child practices skill independently while adult observes.

6. After demonstrating mastery on all strategies, the peer agent teaches social skills to the handicapped child for 10 to 30 minutes each day. The adult monitors the peer agent's performance and continues to provide feedback and correction on a regular basis.

INITIATING SHARE OFFERS

Sub-steps

a. Turns towards peer

b. Faces peer

c. Says peer's name

d. Says "Here" or "You can have this."

e. Places item in peer's hand

f. Keeps trying if peer does not respond

g. Taps peer on shoulder

h. Walks around to face peer

i. Says peer's name again

j. Says "take this."

HOW LONG SHOULD TEACHING EFFORTS PERSIST?

TEACHING THE PEER AGENT

Date____________Trainer____________________Student__________________

I) Social Initiation Strategies	Verbalize	Perform
a. Turns towards peer	________	_______
b. Faces peer	________	_______
c. Says peer's name	________	_______
d. Keeps trying if peer does not respond	________	_______
e. Taps peer on shoulder	________	_______
f. Walks around to face peer	________	_______
g. Says peer's name again	________	_______

II) Sharing and Requesting Strategies	Verbalize	Perform
a. Listens to peer and does what peer asks	________	_______
b. Asks for toy and holds out hand	________	_______
c. Gives toy to peer by placing it in peer's hand	________	_______
d. Gives a toy to peer within one minute after the child's request	________	_______

NOTES

ARE THE TEACHING EFFORTS SUCCESSFUL?

CRITERIA FOR JUDGEMENT

I) Observing Program Consumers

1. Does the handicapped child perform the desired social skills more frequently?
2. Does the handicapped child perform undesirable social skills less frequently?
3. Do these social skill improvements occur in nontraining situations?
4. Do these social skill improvements persist after termination of the teaching program?
5. Does the handicapped child demonstrate skill improvements that were never formally taught by the teaching program?
6. Do individuals in the handicapped child's social environment (e.g., peers, parents, teachers, etc.) interact more positively with this child?
7. Does the handicapped child's performance approximate that of peers who did not receive social skills training?

Public School Teachers for Preschool Handicapped Children Are They Ready?

Patricia S. Miller
Appalachian State University
Boone, North Carolina

TEACHER TRAINING

The challenge to state education agencies to provide quality intervention services to all three, four, and five year old handicapped children by 1991 will require attention to several critical factors. Among the most important are: 1) the training and certification of highly competent teachers, 2) making decisions about labeling, and 3) delivering individually appropriate educational services. Teacher training programs focused on intervention with very young handicapped and at-risk children have been in existence for two decades and have continued to refine and validate essential competencies required of early childhood special educators (McCollum, 1981). The population of children to be served by these teachers includes those children with documented central nervous system damage as well as those with developmental and learning delays which place them at risk of school and societal failure. These two groups of children are often served in the same classroom and by the same teacher.

The range of learning needs in classes for preschool handicapped children requires that teachers be prepared to design and use strategies geared toward a broad developmental continuum for children with mild to severe needs. Research evidence suggests that teachers of preschool handicapped children need the blend of knowledge and skills in two basic approaches to early education: the developmental approach which facilitates the child's natural developmental patterns and sequences through a carefully arranged environment, and the behavioral approach, which utilizes strategies for teaching discrete functional behavior and skills (Bailey & Wolery, 1984; Neisworth & Bagnato, 1987; Peterson, 1987). The best of what we know from the fields of early childhood education, child development and special education interact to form a substantial knowledge base in early intervention. This expanding knowledge base enables early childhood special educators to develop individually appropriate education programs based in the knowledge of how early development and handicapping conditions influence each other and how to intervene at the points of influence to prevent further impact and to facilitate forward growth. Teachers acting from this now vast knowledge base tend to avoid the use of premature and often erroneous labels for children as reasons for teaching, or not teaching, in particular ways. Categorical labels are an unnecessary part of early education for children with typical learning needs and, in fact, divert the teacher's attention from the child's unique place in his development, and from his potential for growth. P. L. 99-457 encourages programs to serve these children without regard to labels (Smith, 1987). This legislative and philosphical position carries implicit direction for teacher training in early childhood special education.

Early childhood special educators are specially trained professionals in the field of early childhood special education (McCollum, 1986). Good fifth grade teachers who have a depth of understanding about how and what to teach ten year olds no not possess the knowledge and skill for intervention with handicapped preschool children. Developmental and learning needs of the preschooler, as well as instructional methods and teaching strategies, are vastly different from those of the ten year old, or even the seven year old.

Commercially produced curriculum packages which provide sequenced activities and learning objectives for young children may be useful to trained teachers but cannot substitute for the necessary specialized body of knowledge, and required competencies for teaching the young handicapped child. Early childhood special educators need a firm grounding in related theory and research in early intervention, normal early child development, planning and assessment, learning theory, environmental design, early childhood education, and working with families of young handicapped children (Bailey & Worley, 1984). Research examining the determinants of effectiveness and credibility of early intervention programs indicates that the educator, not the program, may be the crucial variable in creating child change (Stedman, 1987). The identification, training, and hiring of competent teachers is a critical issue for administrators of programs for young handicapped children. Persons hired for these classrooms, if not yet certified in ECSE, need to have had experiences with young handicapped children. They should have a basic repertoire of appropriate instructional skills and should have knowledge of early childhood development. The transplanting of out-of-field and untrained teachers into the preschool setting cannot be seen as acceptable practice. Existing community programs can be engaged as peer consultants and models for less experienced peers. Nationally recognized models of early intervention can provide training and information. Resources for the training and certification of early childhood special educators in North Carolina are many and growing. Undergraduate and graduate training programs designed to meet the needs of both the full-time student and the field-based student are under development. The State Department of Public Instruction is sponsoring training efforts toward certification throughout the state which meet essential professional standards. Quality preparation of early childhood special education teachers requires the attention by principals, special education directors, and state agencies toward comprehensive and cohesive training efforts.

Most experts agree on the roles and responsibilities of the early childhood special educator. These roles include those of: educational assessment expert, prescriptive programmer, educator/therapist, parent consultant and educator, and program evaluator (Neisworth & Bagnato, 1987). The nature of the complexities often encountered in serving young handicapped children in terms of related health, medical, social, and family needs, means that the teacher must collaborate with a team of related professionals. Working as an interdisciplinary team member encompasses skills in communication and translation of specific professional knowledge, and the ability to direct or participate in team planning, to carry out interdisciplinary intervention programs, and to evaluate and monitor progress in children and families.

The most common type of delivery system for preschool handicapped children in the 3 - 5 year range is the center-based classroom in regular education settings. While most of these classrooms are self-contained, there is a trend toward developmentally integrated programs for handicapped and non-handicapped preschoolers. Teachers in programs for preschool handicapped children spend most of their time in instructional roles. Consequently, it may be that the most pressing needs for new teachers in early childhood special education programs in North Carolina are the development of a core set of instructional strategies which will give them and their students a better chance of good beginnings. Best practice, of course, would be the involvement of teachers in a comprehensive, well-sequenced program of development in the field of early childhood special education. The demand for programs and teachers in North Carolina is a step ahead of certification, which results in a necessary start-up period with some programs being staffed by persons not certified in early childhood special education. Administrators will begin designing in-service training activities to meet essential basic needs and at the same time will assist teachers in becoming fully certified by 1991.

Identification of features of high quality early intervention programs will assist administrators and teachers in prioritizing needs for training. Several features have been identified as generic to quality early intervention programs regardless of variability in types of children, or approaches to intervention. These features include:

1. Individualized education goals and objectives for each child.
2. Individualized curriculum and learning activities based on child objectives.
3. Monitoring and evaluation of each child's progress.
4. Opportunities for interaction with peers who offer appropriate developmental models.
5. An adapted, supportive environment.
6. A healthful and safe learning environment.
7. Interdisciplinary involvement, coordination, and planning.
8. Parent participation and input.
9. Compliance with state education and/or preschool regulations.
10. Compliance with federal and state legislation and standards for early childhood special education programs.
11. Employment of proven instructional strategies.
12. Demonstration of an underlying philosophy of child development. (Bailey & Wolery, 1984; Neisworth & Bagnato, 1987; Peterson, 1987).

Within these quality programs, teachers teach. They employ specific and systematic teaching methods in carrying out individualized instructional sequences. These teaching methods are typically derived from the behavioral/developmental approach to early intervention (Bailey & Worley, 1985; Neisworth & Bagnato, 1987; Peterson, 1987). Fallen and Umansky (1985) outlined and described these general instructional strategies, based on learning principles, which have been effectively and efficiently used with preschool handicapped children. These authors recognize that while these instructional strategies have been identified as skill areas needed by the early childhood special educator, the teacher must continually evaluate, modify, and carefully select strategies based on the needs of each individual child. Strategies found to be successful with one child may hinder another's progress. Fallen and Umansky (1985) and Neisworth & Bagnato (1987) set forth procedures, strategies, and tactics as essential to the teaching skills repertoire for the early childhood special educator. The following instructional skill areas can be recommended by these experts as target areas for in-service and preservice methods training: 1) analysis and design of the learning enviroment 2) task analysis and skill sequencing; 3) behavior shaping and chaining of responses; 4) prompting and fading; 5) modeling and imitation; 6) questioning; 7) activity pairing; 8) discrimination learning; 9) positive reinforcement systems; 10) teaching for generalization; and 11) program evaluation.

It is important to remember that teaching methods are integral functions of a driving philosophy and theoretical approach to early intervention. While they can be acquired as discrete instructional tools, eventually the teacher must place these methods within a meaningful and personally accepted framework for working with young handicapped children. Carefully formulated plans for in-service and continuing education activities to insure comprehensive teacher training will put North Carolina on the track toward provision of the kinds of programs and opportunities to which our youngest and most dependent are entitled.

References

Bailey, D., & Wolery, M. (1984). Teaching infants and preschoolers with handicaps. Columbus, OH: Merrill.

Fallen, Nancy H., & Umansky, W. (1985). Young Children with Special Needs, 2nd ed., Columbus, OH: Merrill.

McCollum, J. (1987) Early interventionists in infant and early childhood programs: A comparison of preservice training need. Summary of results of two studies designed to describe roles and training needs of teachers in programs for infant and preschool handicapped children. University of Illinois, Champaign - Urbana.

Neisworth, J. T., & Bangato, J. (1987), The young exceptional child, early development and education. New York: MacMillan.

Peterson, N. L. (1987). Early intervention for handicapped and at-risk children: An introduction to early childhood special education. Denver, CO: Love Publishing.

Smith, B. J. (Ed.) (1987). Position Statements and recommendations relating to P.L. 99-457 and other federal and state early childhood policies. Position statements to policy issues adopted by the National Executive Board of the Division for Early Childhood (DEC), Council for Exceptional Children (CEC).

Stedman, D. J. (1987). The essential value of early education. Paper presented to the Twelth Annual Conference on Education. Melbourne, Australia, October, 1987.

Listening To, Guiding, and Assisting Parents

Mary Jane Brotherson
University of Kentucky
Lexington, Kentucky

Historical View

A brief review of the roles that families have been historically placed in by professionals. Lessons from the past help guide us in the present.

A. The Family as the Source of the Problem

B. The Family as Therapists/Teachers of Their Children

Working with Families: A Family Systems Approach

The family is a unit of many interactions - an interactional system. Events affecting one member can have impact upon all members.

A. Family Resources - All families differ

B. Family Interaction - All families have needs

C. Family Functions - All families are busy

D. Family Life Cycle - All families change

Helping Families Cope

A discussion of strategies and activities to assist families who have young children with disabilities.

A. Recognize and Respect Family Values

B. Help Families Identify Positive Contributions

C. Help Families Plan for the Future

D. Develop Communication Skills and Channels

E. Use a Problem-Solving Approach to Meet Family Needs

F. Assist Families in Developing a Social Support Network

Recognize and Respect Family Values

Values Clarification

1. Read through and think about the items on the "Values" List.
2. In Column A: Indicate the three values that are most important to you.
3. In Column B: Think about families with whom you have had the most negative experiences. Indicate the three values that you think are most important to them.
4. In Column C: Think about families with whom you have had the most positive experiences. Indicated the three values that you think are most important to them.

A	B	C	Values
___	___	___	A comfortable life (peaceful and prosperous life)
___	___	___	Broad-minded (able to accept differences)
___	___	___	Cheerfulness (lighthearted, joyful, positive outlook)
___	___	___	Equality (equal opportunity for all)
___	___	___	Happiness (contentedness)
___	___	___	Independence (autonomy, acting on one's own choice)
___	___	___	Logical (consistent, logical, problem-solving approach)
___	___	___	Loving (affectionate, tender, intimacy)
___	___	___	Security (feel safe and protected)
___	___	___	Pleasure (an enjoyable life, a leisurely life)
___	___	___	Salvation (deliverance from sin, eternal life)
___	___	___	Self-respect (self-esteem)
___	___	___	A sense of accomplishment (making a significant contribution, working for the welfare of others)
___	___	___	Social recognition (respect, admiration)
___	___	___	True friendship (close companionship)
___	___	___	Wisdom (a mature understanding of life)
___	___	___	Control (exercising power over others)
___	___	___	Conformity (minimizing differences between self & others)
___	___	___	Self-sufficiency (taking care of one's own needs)

TYPES OF PARENTAL INVOLVEMENT

Type	Nature of Involvement
1. Limited Involvement	Parents consent to have their child participate in the program. Additional involvement includes minimal program requirements, such as attending IEP conferences.
2. Communication Involvement	Parents may be involved in periodic discussions with professionals concerning child's program. Communications may take such forms as periodic phone calls or written monthly reports exchanges.
3. Training Program Involvement	Parents may be involved in carrying out home programs with their child. Parents may also be involved in training programs designed for parents.
4. Active Team Member	This type of involvement is characterized by parents and professionals working closely to select program goals, teaching selected skills, and evaluating program effectiveness.
5. Mentor for Other Parents	Parental participation is characterized by providing program information, emotional support, and encouragement to new families. Involvement may take such forms as individual contact with new families or coordinating a parent support group.
6. Practical and Material Involvement	Parents may be involved in helping the school or program by activities such as repairing or constructing instructional devices, assisting in building playground equipment or assisting in providing transportation for community trips.
7. Advocate and Policymaker	As an advocate, parents may become involved in identifying community needs, identifying and responding to those who resist change, building alliance with other groups or taking action on issues through such forms as letter-writing campaigns.

Help Families Identify Positive Contributions

WHAT ARE YOUR FAMILY STRENGTHS?

Economic

Making enough money
Having a good job
Managing the budget
Teaching children about money

Recreation

Having interesting hobbies
Participating in sports
Having family fun
Just relaxing

Health and Security

Exercising
Eating right
Getting enough rest
Getting enough medical/dental care
Feeling free from danger

Affection

Feeling loved
Expressing love
Having intimate relationships

Physical

Taking care of clothes (laundry, mending,ironing, etc.)
Taking care of yourself (bathing, dressing, grooming, etc.)
Cleaning house
Having adequate transporation
Shopping
Making household repairs

Self-Definition

Feeling needed and worthwhile
Feeling content with who you are
Needing other people
Feeling good about job
Feeling good about home and family

Socialization

Being with family
Being with friends
Having close friends

Education

Going to school (school, college, technical, etc.)
Learning new job skills
Learning new things in general

A Matter of Pride

During conversation, each member of the family is asked to complete the sentence, "I am proud that..." it's a strategy for sharing, and building self-esteem. People can't have a healthy self-concept or know who they are without pride. This is a way to be proud of what you do and who you are and to affirm it with your family. Pride can be regarded as a present to be shared. People can't be expected to be proud of everything they do or feel, but they should be able to define those things about which they do feel good.

Here is a suggested Matter of Pride checklist:

____ Something I recently made as a gift for someone
____ My savings account
____ What I accomplish independent of others
____ A special friendship I have made
____ An athletic accomplishment
____ Something I did that was a source of safisfaction
____ Praise I received for some special achievement
____ My ability to express my feelings on particular issues
____ Some difficult skills I learned recently
____ I realized a long-sought-for goal
____ Helping someone with a difficult problem
____ Sensitivity I showed to someone else's feelings
____ The religious beliefs I live by
____ I helped someone in the family
____ Something I did that was creative
____ An occasion when I was particularly open and honest
____ My ability to think positively about people and the world
____ Something I did that demonstrates love
____ A conversation where I listened carefully to what someone else had to say
____ I spent my allowance on ____________________________
____ Something I did to keep healthy

(There are endless possibilities for a Matter of Pride. Think of those that are special to your family).

Help Families Plan for the Future

POSSIBLE ISSUES ENCOUNTERED AT LIFE CYCLE STAGES

Life Cycle Stage	Parents	Siblings
Early Childhood, ages 0-5	Obtaining an accurate diagnosis Informing sibling and relatives Locating services Seeking to find meaning in the exceptionality Clarifying a personal ideology to guide decision making Addressing issues of stigma Identifying positive contributions of exceptionality	Less parental time and energy for sibling needs Feelings of jealousy over less attention Fears associated with misunderstandings of exceptionality

Life Cycle Stage	Parents	Siblings
School Age, ages 6-12	Establishing routines to carry out family functions Adjusting emotionally to educational implications Clarifying issues of mainstreaming v. special class placement Participating in IEP conferences Locating community resources Arranging for extracurricular activities	Division of responsibility for any physical care needs Oldest female sibling may be at risk Limited family recreation and leisure Informing friends and teachers Possible concern over surpassing younger sibling Issues of "mainstreaming" into same school Need for basic information on exceptionality

Life Cycle Stage	Parents	Siblings
Adolescence, ages 13-21	Adjusting emotionally to possible chronicity of exceptionality Identifying issues of emerging sexuality Addressing possible peer isolation and rejection Planning for career/vocational development Arranging for leisure time activities Dealing with physical and emotional change of puberty Planning for postsecondary education	Overidentification with sibling Greater understanding of differences in people Influence of exceptionality on career choice Dealing with possible stigma and embarrassment Participation in sibling training programs Opportunity for sibling training programs

Life Cycle Stage	Parents	Siblings
Adulthood, ages 21-	Planning for possible need for guardianship Addressing the need for appropriate adult residence Adjusting emotionally to any adult implications of dependency Addressing the need for socialization opportunities outside the family for individual with exceptionality Initiating career choice or vocational program	Possible issues of responsibility for financial support Addressing concerns regarding genetic implications Introducing new in-laws to exceptionality Need for information on career/living options Clarify role of sibling advocacy Possible issues of guardianship

Note: From Families, Professionals, and Exceptionality: A Special Partnership by A.P. Turnbull, H.R. Turnbull, with J. A. Summers, M.J. Brotherson, H.A. Benson, 1986, Columbus OH, Merrill Pub. Co.

BASIC ADULT NEEDS

Adults with disabilities have the same basic needs as the general population. They will, however, require varing amounts of additional support to meet their needs.

1. Self-Determination/Choice: The need to express choices and preferences. It is the opportunity to assert control over what happens to one's self. It reflects the basic belief in independence, dignity, and self-determination for all persons.

2. Residential: The need to live in the least restrictive environment that meets both physical needs and preferences.

3. Vocational: The need for employment in supported and competitive markets. Work produces income which increases self-esteem and empowers people.

4. Recreation and Leisure: The need to participate in meaningful leisure activities in the community. The need to choose leisure activities and friends involved in these activities, based upon principles of normalization and individual choice.

5. Sexual Expression and Affection: The need to have an opportunity to fulfill sexual and affection needs appropriately. The need to have available programs designed to teach body functions, sex roles, responsible sexuality, birth control, appropriate public behavior, dating, and avoiding exploitation.

6. Financial and Legal Planning: Support to meet individual needs in areas such as estate planning, management of SSI and SSDI monies, Medicare and Medicaid programs, guardianship and conservatorship, and personal finances.

7. Transportation and Accessibility: The need for mobility about the community. The inability to freely move about in the community leads to segregation and seriously inhibits physical and psychological growth.

8. Continuing Education: The need for ongoing or new skills in daily living, leisure, social, or learning areas of one's choice.

Develop Communication Skills and Channels

Parent Communication Index

Please read the following three situations. For each situation, four possible teacher responses are given. Read each of the three situations and then mark the response you believe would be the most effective in sustaining a meaningful dialogue with the parent.

Situation #1

Johnny, age 3 1/2, has been found to be eligible for placement in a preschool special eduction class. His only expressive language consists of grunts and gestures. He has been evaluated by a local speech and hearing clinic as having severe language disabilities. Johnny's parents appear indifferent to this diagnosis, and are convinced he will outgrow his language problem.

The teacher assigned to work with Johnny makes her initial contact with the parents in a home visit. After she explains the benefits of the preschool program for Johnny, the mother replies: "There's nothing wrong with him. We don't have any history of retarded people in our family. Johnny is just slow to talk, that's all. I don't understand what all the fuss is about?"

Response Choice

___ 1. "It only natural to feel the way you do. Nevertheless, it wouldn't hurt to enroll Johnny in our preschool program. It's really his best opportunity for improvement."

___ 2. "Well, let's talk about it, o.k.? Sometimes these things seem worse on the surface than they really are."

___ 3. "Do you have any ideas as to why Johnny is the way he is?"

___ 4. "It's really tough to accept the idea that Johnny may have a handicapping condition."

Situation #2

Billy, age 4, receives weekly home visits in conjunction with eductional services at the Cerebral Palsy Center. During one of these home visits, Billy appears visibly different, not wanting to talk with the teacher and avoiding eye contact. The teacher notices extensive bruises on his arm. Sensing a problem, the teacher initiates a conversation with Billy's mother regarding his different behavior. The mother confides that she became angry with Billy last night and forcibly pushed him into a wall. She then says, "You don't know what it's like to work all day then have a child like Billy waiting for you when you get home."

Response Choice

___ 1. "But what Billy needs is love and attention. If you find him so hard to bear, perhaps you should seek professional help."

___ 2. "I know how tough it must be to work hard all day and then be overwhelmed with problems when you get home. Fortunately, things always seem to have a way of working themselves out."

___ 3. "Have you always felt this way about Billy, or is it something that just happened recently?"

___ 4. "You work hard all day and it's terribly frustrating to go home and be with Billy. It's something that other people really can't understand."

Situation #3

Donna, age 5, has been in a preschool program for developmentally delayed children for the past three years. Because of her age, she will have to enter a new program this year, one which requires classifying children according to traditional categories of exceptionality. At a meeting called to review and develop Donna's individualized education program, it is recommended that she be placed in a class for trainable retarded children. Donna's mother is furious. "You never said Donna was retarded - delayed. I'm not going to let you place her in that class. I know my rights!"

Response Choices

__ 1. "This placement is really in Donna's best interest. Believe me, we wouldn't make such a recommendation unless we were absolutely sure it was the best program for her."

__ 2. "Have you ever talked with the teachers in a class of this type? Why don't you and I go and visit a classroom and meet the teacher ? It may surprise you."

__ 3. "Where would you be most comfortable seeing Donna placed?"

__ 4. "You feel very strongly about Donna's placement, and no matter what anyone says, no one is going to label your child mentally retarded."

Taken from: Beale, A., & Beers, C.S. What do you say to parents after you say hello? Teaching Exceptional Children, 1982 15 (1) 34-38.

BUILDING COMMUNICATION

Roadblocks to Overcome

These are examples of messages that put up roadblocks to communication. These should be avoided because they increase the probability of shutting off further discussion.

1) Ordering, directing, commanding (You will do this program!)
2) Warning, admonishing, threatening (If you don't do that, I'll...)
3) Exhorting, moralizing, preaching (You should do that!)
4) Advising, giving solutions or suggestions (I'd try....Let me suggest...)
5) Lecturing, teaching, giving logical arguments (Do you realize...)
6) Judging, criticizing, disagreeing, blaming (You're lazy!)
7) Name-calling, ridiculing, shaming (Uncaring, self-centered!)
8) Interpreting, analyzing, diagnosing (Your problem is...)
9) Probing, questioning, interrogating (Why did you do that?)
10) Withdrawing, distracting, humoring, diverting (We don't talk about that in this situation.)

All of us get caught in one or more of these roadblocks occasionally. It is important to remember that by changing the focus to "I" statements, attending to what the other person is feeling and saying and providing feedback, we can enhance communication.

Tips for Dealing with Aggression

DO

__ 1. Listen
__ 2. Write down what they say
__ 3. When they slow down, ask them what else is bothering them
__ 4. Exhaust their list of complaints
__ 5. Ask them to clarify any specific complaints that are too general
__ 6. Show them the list and ask if it is complete
__ 7. Ask them for suggestions for solving any of the problems that have been listed
__ 8. Write down the suggestions
__ 9. As much as possible, mirror their body posture during this process
__ 10. As they speak louder, you speak softer

DON'T

__ 1. Argue
__ 2. Defend or become defensive
__ 3. Promise things you can't produce
__ 4. Own problems that belong to others
__ 5. Raise your voice
__ 6. Belittle or minimize the problem

Note Adapted from University of New Mexico Institute for Parent Involvement, Albuquerque, New Mexico, 1979.

COMMUNICATION WITH FAMILIES

Please indicate which methods of communicating you would prefer to use and how often.

	USE		HOW OFTEN			
	Yes	No	DAILY	WEEKLY	MONTHLY	OTHER Please Specify
1. Log Book						
2. Informal Phone Contact..						
3. Phone Call-In Evening...						
4. Newsletters............						
5. Home Visits............						
6. School Visits..........						
7. Family Inventory........						
8. Individual Program Report.................						
9. Social Integration Report................						
10. Other..................						

Please place a check mark (✓) before the kinds of information you would like to receive and/or share.

____ 1. Progress on Individualized Program objectives
____ 2. Social interactions with nonhandicapped peers
____ 3. Medical Information
____ 4. Input from support service providers (e.g., Occupational Therapist, Speech/Language Therapist, Physical Therapist)
____ 5. Daily schedules and routines
____ 6. Special projects
____ 7. Community-based training programs
____ 8. Information about staff (new personnel, peer tutors, etc.)
____ 9. Information about school/program in general
____ 10. OTHER (please specify) ____________________ ____________________

A CASE STUDY IN

EARLY CHILDHOOD SPECIAL EDUCATION SERVICES:

THE MILLER FAMILY

The Miller family includes Mr. Al Miller, age 34, Mrs. Rita Miller, age 32, Doug, age 7, and Scott, age 3. They live in a small two-bedroom rental house. Mr. Miller has been unemployed since April, and Mrs. Miller is not employed outside the home. Currently, Mr. Miller is receiving an unemployment check. Scott is developmentally delayed and has mild cerebral palsy. The Millers are considering enrolling him in an early intervention program.

Mr. Al Miller (Father)

Mr. Miller has been looking for work for the last nine months and hasn't found a job. He said "I'm glad the telephone is gone because bill people can't call me anymore." Mr. Miller finished high school, but has a lot of difficulty with reading and writing. Mrs. Miller reads the paper to locate jobs for him and fills out job applications for him.

Mr. Miller is a quiet man; his favorite hobby is "watching TV." Besides looking for work, he rarely goes out without Rita, except to take the boys over to his mother and father's house. He indicated that, if they had the money, he would like to take Rita out once in a while.

The grandparents live close by, and when there is enough gas, they go to visit. Mr. Miller likes for the boys to visit their grandparents, but he said, "Mother is getting very forgetful, kinda senile, and I'd be afraid to leave them over there." Al is also very concerned about the future of his parents. Who will take care of them in their old age? Neither grandparents will admit that any of the grandchildren could be "retarded."

Mr. Miller helps with household chores, spends time with the boys, shares disciplining with Rita and also the giving of hugs. He stated, "I enjoy taking care of the kids." He had helped to toilet train Scott, however, Scott still is not trained. He also helps Doug with his homework; Doug is in an EMH class. When it comes to dealing with school personnel, Mr. Miller says, "Rita takes care of the education stuff." The early childhood specialist, talked with Mr. Miller about getting Scott into a program. He said, "I don't really understand why Scott needs it."

Mrs. Rita Miller (Mother)

Mrs. Miller has been described as the "big mother of all mothers." She is a very caring, nurturing person, not only to her own children, but also to other extended family members. She weighs about 280 pounds. She has high blood pressure and heart problems. Rita commented that her doctor told her a couple of years ago, "You're an old woman at 30."

Mrs. Miller is very close to her sister, both emotionally and geographically--she and her husband and two children live three houses down the street. Rita commented that, "My sister encourages me a lot." Rita's sister provides emotional support, but all extended family members are very poor. Rita stated, "No one in this family has money."

Rita's sister helps whenever she can. She was able to get a small T.V. for the family, and on occasion she will take care of the boys.

Rita's favorite hobbies are reading, crossword puzzles, coupon cutting, and cake decorating. She has been making birthday cakes until the stove broke, and because there was no money to repair it, she lost her hobby as well as some family income. Rita worries about paying the bills, but she said, "My kids come first--before I'll pay the bills, I'll feed my kids."

Rita's parents live 30 miles away, so they don't get to visit them often and without a telephone she doesn't get to talk with them often. She described all of her family as a "talking family."

Rita does not have any activities apart from her family. When talking about going anywhere, she said, "If the kids can't go with us, we don't go. "I feel like my life is in a rut right now--even if you're 90 I feel people should keep developing--a person can always change. I would like to enroll in the university because I enjoy learning and meeting new people. But I guess my job is to take care of these kids."

Rita shared a secret of hers--three little items she keeps close by: a mustard seed for faith, a happy face for positive outlook, and a rainbow for hope. But sometimes that hope weakens. She sighed, "I don't ever plan for the future anymore--something is always there to shoot it down."

Doug

Doug is currently in second grade, but he has had a far more eventful life than most seven-year-olds. When he was three, Mrs. Miller became very worried about his fatigue, lethargy, and the blueness of his lips. After several medical examinations, it was discovered that he had a serious malformation of the heart. The doctors predicted that correction would involve three major operations, but the doctors were able to make all repairs in one open-heart surgery. As Doug grows, the original repair may need to be altered. Within the next three years, Doug had a serious concussion, and a broken arm. The medical expenses have been covered by their "medical card." Currently Doug is eight months overdue for a checkup with the cardiologist; however, his parents have no money to make the 110-mile round trip to the medical center.

Doug's learning problems were identified in Kindergarten, and by the end of the year, the school team had decided to place him in the EMH-I class. The plan included provisions for mainstreaming in art, physical education, and music.

Doug is shy, polite, and cheerful. He doesn't go outside much; Mrs. Miller at first was afraid he would over-exert himself with the neighborhood kids, but in fact the neighbor kids tease him too much and Doug stays inside without much coercion from his mother. Some of the children tease Doug about Scott wetting his pants. Doug is proud of his art work and Mrs. Miller displays it all around the house.

Scott

At age three, Scott is the youngest member of the Miller family. Mr. and Mrs. Miller are afraid that history might repeat itself. Scott is developing language very slowly, is not toilet trained, and seems to take a long time to learn new skills. His cerebral palsy has produced mild involvement of his right arm and leg and causes difficulty in some fine and gross motor skills. They have fears that Scott might also be "mentally retarded." They also see behavioral indications that remind them of Doug's early years--Scott seems to have periods of fatigue and lethargy. These were the first indications of Doug's heart problems.

DISCUSSION

1. Identify some of the needs of the Miller family.

Mr. Miller

Mrs. Miller

Doug

Scott

2. Use a problem solving approach to address one of the needs identified.

Assist Families in Developing Social Support Network

Exercise: Strengthening Social Support

1. Who are the members of my family?

2. What other relatives, close friends, neighbors, co-workers, church or synagogue members, and others provide me with social support?

3. What roadblocks do I have to using friends, neighbors and relatives for social support? It may be helpful to divide those roadblocks into two groups; those that are practical roadblocks, such as lack of time or transportation, and those that are value roadblocks, such as believing you have sole responsibility, or that you do not want to burden others.

   Practical Roadblocks　　　　Value Roadblocks

4. What steps could I use to overcome one of these roadblocks?

   Practical Roadblocks:　　　　Value Roadblock:

   Steps:　　　　Steps:

Small Group Exercise

Generating Alternatives

A. Select a priority need (for the family member assigned to your group) to address at this time.

B. Generate alternative solutions to meet this need. Include ways that other family members can help.

C. Compare alternatives on the basis of two criteria: resources for implementation, and barriers to implementation.

D. Use these criteria to rate each alternative (1 = good; 2 = fair; 3 = poor) and select one or more for implementation.

Need Selected:

Alernatives	Resources	Barriers	Rating
1.			
2.			
3.			
4.			
5.			

SOCIAL SUPPORT-YOUR FAMILY AND BEYOND

Listed below are several types of people who might make up your social support network, along with a scale to rate how helpful they are. Circle the number that best describes how helpful each one is to you. Leave the space blank if that person or group does not apply to you. Use a different color pen for each family member who fills this out, and compare your answers.

Family support scale

	Not at all helpful	Sometimes helpful	Generally helpful	Very helpful	Extremely helpful
1. My parents	0	1	2	3	4
2. My spouse's parents	0	1	2	3	4
3. My relatives/kin	0	1	2	3	4
4. My spouse's relatives/kin	0	1	2	3	4
5. Husband or wife	0	1	2	3	4
6. My friends	0	1	2	3	4
7. My spouse's friends	0	1	2	3	4
8. My own children	0	1	2	3	4
9. Other parents	0	1	2	3	4
10. My family physician	0	1	2	3	4
11. Co-workers	0	1	2	3	4
12. Parent, spouse, or other self-help groups	0	1	2	3	4
13. School (teachers, therapists, psychologists, etc.)	0	1	2	3	4
14. Professional agencies (public health, social services, respite care, activity program)	0	1	2	3	4
15. Civic groups/clubs	0	1	2	3	4
16. Clergy and congregation of your place of worship	0	1	2	3	4

Adapted from Dunst, C., Jenkin, V., & Trivette, C.M. (1984). The Family Support Scale. Journal of Individual, Family, and Community Wellness, 1 (4), 45 - 52.

SUPPORT
SERVICES